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ABSTRACT

This document is the first volume in a set of five Career Education Measurement Handbooks intended to help local education personnel in measurement and evaluation. Divided into eight chapters, this handbook provides practical guidelines for assessing experiential learning and includes historical and theoretical information relevant to experiential learning. The introduction found in chapter 1 presents the rationale, organization, and suggestions for using the handbook. Chapter 2 provides an overview of experiential learning and explains some key contrasts between it and traditional learning. Chapter 3 presents several viewpoints of persons who have had experience in the assessment of experiential learning activities on the secondary level. Chapter 4 describes the methods most frequently used to assess various components of experiential learning programs. Chapter 5 presents viewpoints of persons with experience in postsecondary experiential programs. Guidelines for use in planning, implementing, and reviewing programs are included in chapter 6; and chapter 7 provides a quick index to the major concepts addressed by each of the writers in chapters 3 and 5. The final chapter suggests resources to aid in the further study of assessment in experiential learning and to help with the development and operation of a program. (BM)

Research and Development Series No. 165

CAREER EDUCATION MEASUREMENT HANDBOOKS.

ASSESSING EXPERIENTIAL LEARNING IN CAREER EDUCATION

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1979

THE NATIONAL CENTER MISSION STATEMENT

The National Center for Research in Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The National Center fulfills its mission by:

- Generating knowledge through research
- Developing educational programs and products
- Evaluating individual program needs and outcomes
- Installing educational programs and products
- Operating information systems and services
- Conducting leadership development and training programs

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

National Institute of Education

FOREWORD

Educators have often been criticized for viewing their role merely as dispensors of knowledge and showing a lack of concern with the application and relevance of this knowledge to their students' future lives. However, the general public has begun to accept the idea that the educational system has a responsibility to assist *all* individuals in making orderly transitions to the world of work. Additionally, during the last decade, a number of innovative activities, projects, and/or programs have been developed at the federal, state, and local level in which personnel are attempting to link education and work. Among these programs and/or projects are the following examples: career education, Experience-Based Career Education (EBCE), Part D exemplary projects in vocational education, Title IV-C of the Elementary and Secondary Education Act (ESEA), Fund for the Improvement of Post Secondary Education (FIPSE), Title I and III of the Comprehensive Employment and Training Act (CETA), etc.

Personnel associated with education and work programs and projects are becoming increasingly aware of the need for information related to accountability and needed improvements. Many reports—some informal, some in the literature—indicate a wide and exciting variety of approaches to evaluating education and work linkage programs. However, the need exists for practitioners to become acquainted with evaluation ideas and materials available for particular situations.

Recognizing these trends, the Education and Work Group of the National Institute of Education (NIE) contracted with the National Center for Research in Vocational Education (NCRVE) to develop five comprehensive "user oriented" handbooks. These Career Education Measurement Handbooks, intended to help local education personnel in measurement and evaluation, are:

- *Assessing Experiential Learning in Career Education*
- *Career Education Measures: A Compendium of Evaluation Instruments*
- *Improving the Accountability of Career Education Programs: Evaluation Guidelines and Checklists*
- *A Guide for Improving Locally Developed Career Education Measures*
- *Using Systematic Observation Techniques in Evaluating Career Education*

This handbook, "Assessing Experiential Learning in Career Education," is designed to provide practical guidelines for assessing experiential learning, and to give the reader a better understanding of experiential learning, historically and theoretically. In addition, the handbook provides resources for further inquiry in terms of both practitioners and academics

The National Center is particularly indebted to Sharon J Malak, specialist at the National Center, Janet E Spirer and Brenda Pellegrini Land, Graduate Research Associates who prepared this handbook. Special recognition should be given to N. L. McCaslin, project director, who coordinated the project, Jerry Walker, Associate Director of Evaluation, who provided invaluable

assistance throughout the project, and Michael Crowe, specialist at the National Center, who contributed to the development of this handbook Additionally, appreciation is extended to Delia Neuman and Cathy King Fitch who edited the handbook. A special note of thanks is extended to Ronald Bucknam, who originally conceived this handbook series and continued his involvement through development as the project officer for the National Institute of Education. Valuable advice in the design and scope of the handbook series was received from an advisory committee composed of Robert Ebel, Michigan State University; Margaret Ferqueron, State Director of Career Education in Florida; and Deede Sharpe, Georgia Department of Education.

In an attempt to make this handbook truly "user oriented," the National Center is indebted to Jeanne Carney, Donald A Casella, Sister Virginia Clare Duncan, Sheila Gordon, Rex Hagans, Barry Heerman, Michael Ketterhagan, Earl Leininger, Christine McGuire, Layton Olson, David Rosen Robert F Sexton, Robert L Sigmon, Jack Alex Seprling, Frank D. van Aalst and Kenneth N. Wood who prepared the viewpoint papers included in this handbook. Additionally, credit is given to those career education practitioners who participated in the user trial prior to publication. With their valuable assistance, the utility of this handbook has been enhanced.

Finally, a special note of appreciation is extended to Marlene Linton, Pat Bandy, and Nancy Powell who typed the manuscript of this publication.

Robert E Taylor
Executive Director
The National Center for Research
in Vocational Education

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CHAPTER 1

INTRODUCTION

Why a handbook on the assessment of experiential learning?

Do you remember the story of the three blind men who tried to describe an elephant? Each examined a different part of the animal—and so each described a different beast. Describing an experiential learning program and suggesting a way to assess it provides an analogous situation. The background of and the educational practices valued by the person examining the issue determine to a great extent the nature of the information conveyed. This has indeed happened in the field of experiential learning, and the result has been a profusion of conflicting historical, methodological, and philosophical materials on the topic.

This handbook, by providing a brief overview of the field and a number of suggestions for coping with its various aspects, is designed to help minimize some of the current confusion and to assist local coordinators, principals, and teachers of education and work programs in their effort to develop, manage, and assess experiential learning programs. The handbook provides the local developer and practitioner of experiential career education programs with useful information and practical tools to use selectively, according to individual needs.

How is the handbook organized?

You will find that the handbook is organized in a logical, readable format. The next section of Chapter 1 provides a few suggestions on how to use the handbook. Chapter 2 gives a brief historical overview of experiential learning and explains some key contrasts between it and traditional learning. Chapter 3 provides viewpoints of persons experienced with secondary experiential learning, in which they express their views on the assessment of experiential learning, discuss some problematic areas, and provide some practical guidelines and suggestions. Chapter 4 describes the methods most frequently used to assess various components of experiential learning programs. Chapter 5 offers the opportunity to read papers of persons from various backgrounds with experience in postsecondary experiential programs. Although the setting is different, the measurement concepts are quite similar. Chapter 6

offers you a set of guidelines for use in planning, implementing and reviewing your program. Chapter 7 provides a quick index to the major concepts addressed by each of the writers who expressed their views on either the secondary or postsecondary experiential programs. The final chapter of the handbook suggests resources to aid in your further study of assessment in experiential learning and to help you with the developm nt and fruitful operation of your particular program.

Use of this handbook: not a last word . . .

This handbook is by no means the last word in assessing experiential learning. Since programs designed to provide a linkage between formal education and work—programs in which experiential learning is becoming an integral part—are relatively youthful, there simply are not any golden rules for the assessment of these experiences. But the handbook does provide some important background knowledge and offers you the opportunity to expose yourself to a variety of methods, issues, problems, and resources related to the field.

In using this handbook, you first might read through it as you would listen to a radio program or watch a television news report. During a second reading—this time with your own particular situation in mind—you might think about how and where you could use the information in each chapter in your program or in one you may want to develop. Perhaps you will want to contact one of the resource people in Chapters 3 or 5 for further elaboration. Maybe you will want to experiment with a combination of the assessment methods presented in Chapter 4. Yet another alternative would be to use the checklists in Chapter 6 to plan, implement or review your assessment process. Whatever your particular need, and whatever your judgment says will work best, this handbook was designed to guide your further study and to be a tool for daily use.

. . . but a stimulus for your thoughts and ideas!

Remember that many of the innovations most beneficial to humanity were not born in corporate organizations, in faculty senates, or in think tanks. They emanated from the work of individuals Copernicus' geocentric theory, Mendel's heredity laws, and Madame Curie's creative use of radium are only a few examples of the contributions to knowledge that have resulted from individual effort In like manner, creative and innovative teaching and assessment are not found only in teachers' guides or manuals. Most often, they are the products of individuals who gather data from various materials, examine the needs of their own student populations and teaching situations, and then synthesize the information into a new configuration.

This handbook is designed to help you do just that. Experiential learning, in its most desirable form, is primarily individualized, and so should be the use of a handbook to guide its assessment. Only you can design an assessment that precisely fits your needs. Use this handbook to help you—to stimulate your thoughts and to point to your own creation of innovative techniques for the assessment of experiential learning.

CHAPTER 2

OVERVIEW OF EXPERIENTIAL LEARNING

Experiential learning

The popularity of experiential learning programs is, in part, a result of the career education movement. But experiential learning itself is not a new idea. In fact, it has existed in various forms throughout history. Prehistoric people learned by experience to feed, clothe and warm themselves by trial and error. Observing the nature of animals and the elements and then putting the different parts of information together, early people arrived at general principles related to life's necessities through inductive reasoning. Then, acting on general principles derived from previous experience, they placed further experiences within categories. They did not begin with generalizations as we do in most of our traditional classrooms. They learned the parts of principles first, by experience. For example, they may have discovered the warmth of a cave as an offshoot of looking for animals for food. Perhaps after these people had lived in caves for a time, they generalized that wood and branches of trees around them would serve the same purposes as a cave, but would also allow them more freedom to move around in search of food. They induced first, then deduced.

. . . In caves

. . . In medieval guilds

As people became sophisticated, work became specialized and teachers found a place within the social order. Thus, if a son wished to learn about something other than his father's work, he would be taught by someone outside the family. In medieval times a boy learned a trade as an apprentice to a master craftsman. The learning was guided by the master, but the student himself had to experience all that the master had experienced. In order to practice the trade he had chosen, he had to demonstrate skills in that area, but he did not begin with the conclusions of the subject

. . . In castles

Other kinds of experiential learning also flourished in the Middle Ages: a boy learning to be a knight acquired skills in courtly manners, jousting, and warfare from firsthand experience. A girl learning home management worked daily at homemaking tasks in order to acquire these skills. In fact, with the exception of university learning, most of the learning during this period was experiential.

As nations became industrialized and knowledge grew enormously in both scope and amount, colleges and universities—traditional centers of nonexperiential

learning—began to teach subjects other than language, science, mathematics and logic. To become more responsive to the needs of society, the institutions began to offer courses in agriculture, engineering, and other "practical" subjects.

. . . in land-grant colleges

Experiential learning was especially prevalent in la d-grant colleges and even in some elementary and secondary school classes in which teachers afforded students the opportunity to work either outside or inside the school on projects related to a particular subject matter area. You may recall the influence of Mill, Rousseau and Dewey on education. Within the last century, we have seen increasing evidence of experiential learning in the forms of internships in medicine, teaching and law.

. . . in secondary and elementary schools and

Currently, there is a trend in secondary and upper elementary schools to allow students to participate in work settings while learning academic subjects. The rise of vocational education, career education, self directed field work, and so on are examples of those trends. Students participate widely in Junior Achievement. They own and operate minicorporations, sell their arts and crafts repair automobiles, provide child care services, and operate public restaurants on school grounds. Students even build homes for public sale! The students' cries for "relevance" in the early 1960s and the employers' pleas for "experienced" workers have both added impetus to the experiential learning movement.

Despite the fact that experiential learning has existed for centuries, there are still many unanswered questions about its nature and scope. Thus, program coordinators and teachers continue to ask, "What are some concrete, recognizable differences between experiential learning and traditional learning?" Some of the major differences are presented in the following section.

Experiential learning and traditional instruction—a viewpoint

You recall the story of the three blind men and the elephant mentioned in the first chapter Each of the men claimed that the elephant was a trunk, tail, or large foot, depending upon what he touched Each of those members was a part of the animal and so each man was, in part, correct. In like manner, experiential and traditional learning are important parts of the instructional process. each is necessary for particular kinds of learning, but neither is sufficient for all kinds. The major instructional/learning differences are shown in the following table:

Traditional Formal Instruction	Experiential Learning
Step I. Student receives information through written words or oral symbols.	*Step I.* Student performs or observes action and observes its effects.
Step II. Student comprehends general principles.	*Step II.* Student comprehends and understands the effects of action in this particular case.
Step III. Student infers a particular application from the general principle.	*Step III.* Student performs or observes subsequent actions and begins to see connections between actions and effects over similar circumstances. Student then places them within a category under a general principle.
Step IV. Student performs actions on the environment according to the applicability of the inferred principle.	*Step IV.* Student applies general principle to any new problem related to it. He or she has learned the principle.

So let's look at the table again. Do you notice that Step II on the traditional side corresponds closely to Step III on the experiential side? In traditional instruction, the conclusions are given first, whereas in experiential learning, the student arrives at the conclusions or general principles after making a connection between actions and effects. Do you also notice that Step I on the experiential side corresponds to Step IV on the traditional side? As you compare the steps, you will find that experiential learning is more of an inductive learning process, while traditional learning is largely a deductive one. At least in the majority of classrooms, knowledge transmission has been deductive.

It is easy to see that while one kind of learning might be unsuitable when a particular set of outcomes is desired, the other might fit very well. Yet another set of outcomes might require a generous mix of the two kinds of learning. You, as coordinator or teacher in a program, will have to determine what is most efficient according to your students' needs and your goals and desired outcomes. The very act of determining which method or combination to use in your classroom is experiential learning for you!

Yes, there are strong and weak aspects of each kind of learning

Each kind of learning has both advantages and disadvantages. You have probably discovered most of these, but here are a few points for you to consider. In most instances, a student is in an experiential learning program because of an inherent interest in some aspect of it. Thus, inherent interest as well as the tactile and manipulative experiences characteristic of experiential learning can provide a greater degree of motivation than can traditional instruction which most often depends upon factors outside the task of learning to motivate students. Thus, the "hands on" experience of taking an engine apart is for many students greater motivation than a star or high letter grade given for naming the parts of an engine. The traditional classroom experience is less time consuming than experiential learning. Reading about principles, memorizing them, and, in some cases, even reading about their applications takes less time than arriving at principles by trial and error through the manipulation of various objects and ideas. The extra time necessary for experiential learning may produce excellent results, but it is as difficult to assess when a student in experiential learning can go from particular knowledge to comprehension of a general principle as it is to discover when a student in traditional learning knows how to apply a generalization.

You can readily see that traditional learning depends heavily on a knowledge of words, syntax, contextual meaning, and in general, the principles of language. Experiential learning, for the most part, does not require students to be at the same point on the scale of literacy as traditional learning does. Please don't mistake the literacy scale for the intelligence quotient scale. Many students from various subcultures within our society test low in reading and math and on intelligence tests which are reading tests. Even the "non-verbal" ones are rooted in the middle class experience symbols.

The final point is that there is a strong possibility that because of the many tactile, concrete experiences involved in experiential learning, this method might induce longer recall than traditional learning does. Certainly the research on remembering and forgetting shows that there is a high degree of forgetting using more traditional deductive methods. It would seem that the more associations individuals have with an object or event, the better their ability to remember it. I'm sure you recall the story of the little girl who learned the Pledge of Allegiance from memory and, when asked to recite it alone began, "I led the pigeons to the flag . . ." Or perhaps you have seen students wrestle with electricity jargon in science until they begin to make their own small switches and batteries. This is not to say that most learning obtained in traditional classroom situations is forgotten, only that the more kinds of experiences brought to bear on a concept, the more likely the recall and use of that concept will be

Key components of experiential learning . . .

A few key program components set experiential learning apart from traditional learning. A look at these is necessary in order to grasp more readily the problem of assessing experiential learning programs.

. . . academic credit

Students who complete experiential learning programs receive academic credit for their participation ranging from full to none.

. . . participation

The amount of time students spend in experiential programs varies from full to part. The pattern ranges from four full days a week for the entire time in high school to several hours each week for part of a term.

. . . payment

Students receive full, partial, or no pay for their experiences. Students usually receive pay when their participation results in a usable productive service for an employer. Where the students' experiences are essentially educational rather than beneficial to the employers, usually no pay is involved.

. . . program planning

Most experiential learning programs encourage joint planning by both teacher and student. In some programs where the emphasis is more on the experience per se than on educational objectives, students plan or contract for their experiences with little or no adult supervision during the term. Other programs are planned and controlled mainly by the teacher.

. . . administrative supervision

Experiential programs can be supervised completely by the school, completely by a participating business or industry, or jointly. Programs supervised by the school are sometimes called sponsored, and the others, nonsponsored.

. . . role of experiential programs in the school curriculum

Older experiential programs are usually integrated with the academic curriculum. Newer programs are sometimes related to the academic school curriculum but are not considered by some staff a part of the curriculum.

We have only scratched the surface of experiential learning programs—their history, their general nature, their advantages and disadvantages, and their key components. Now we are ready to look at some of the aspects of these programs that are at the heart of the assessment problems.

The need for innovation and creativity in assessing experiential learning

Experiential learning programs are seen in vocational education, cooperative education, career education and in various experience-based work and education efforts. We have already seen that a common theme running through many experiential learning programs is linking education to work or service. All these programs—whether designed to

teach specific vocational skills, to result in a general awareness of occupations or somewhere in between, claim that the student is learning skills, attitudes, and values related to some phase of the work environment. In fact, the major attraction of experiential programs is that they get the student involved in "real world" experiences.

At this point, you may ask, "Is there any other common theme?" The answer is yes: in the learner outcomes sought. Many experiential learning programs are directed at a variety of outcomes related to personal growth. Such outcomes include a better sense of individual identity, more self confidence, less reliance on adult leadership, increased leadership capabilities, and fuller understanding of one's place in the work world. Another set of learner outcomes sought in experiential learning programs relates to problem-solving abilities. These outcomes focus on enabling the learner to develop strategies for solving problems in the work environment or for making better decisions about career and educational goals. Still another group of outcomes is related to social behavior. These focus on helping the student develop effective communications skills, get along with others, and become aware of the "social" and "political" nuances of work environments.

Many of these kinds of outcomes are, of course, sought in traditional learning programs as well. But in traditional programs they are usually sought indirectly. In experiential programs they are sought directly—and this key difference is one of the central problems in assessing experiential learning. Thus, the major assessment problem for experiential learning programs is that most current assessment techniques were developed for and are best suited to measuring outcomes which were learned indirectly in the traditional academic curriculum.

What are some important considerations in assessing experiential learning?

Let's look more closely at six major considerations in assessing experiential learning.

. . . assumptions

1. Assumptions about Experiential Learning

The assumptions (e.g., nature, purpose, value) underlying experiential learning programs vary from program to program. This variation is reflected in an evaluation study of the *Executive High School Internships Program* (EHSIP, Crowe and Walker, 1979) The report revealed that the six original assumptions underlying the program did not reflect the reality of the program or participants' (e g., students, sponsors, coordinators) behavior. As a result of the researchers' experiences, six alternative assumptions are posited. This research suggests that a clear statement of the assumptions undergirding the experiential learning program is essential in order to design goals with which all persons involved with the program will be in agreement.

. . . **goals**

2. Goals

As we have seen, the goals of traditional academic programs are well known. State departments of education have reams of material describing them! Although vocational and cooperative education programs also have many well established goals, the movement to include goals related to values and attitudes about work has resulted in some difficulty. Additionally, while goals in the affective domain are appealing, they have not lent themselves to assessment as readily as have traditional academic goals

. . . **outcomes**

3. Outcomes

The individualized nature of experiential learning programs for students presents some difficulty for the evaluator who assesses a program solely against the extent to which it meets its goals and objectives. For example, the EHSIP study found that there was a difference between the private intentions of the participants, program sponsors and program coordinators and the stated program objectives. Therefore, assessment of experiential learning programs should focus on both the intended outcomes (as reflected in the goals and objectives) and the unintended outcomes (which are present in any educational program). When studied singularly, intended outcomes or unintended outcomes present a partial view of a program's effectiveness. However, together they provide a more complete view of the program's strengths and weaknesses. For more detailed information about intended and unintended program outcomes, see *Using Systematic Observation Techniques in Evaluating Career Education* (Kester, 1979), in this Career Education Measurement Series.

. . . **learning environment**

4. Learning Environment

In the traditional academic program, the focus of the learning activities is within the controlled environment of the classroom In the experiential learning program, the location of the learning activities is in an environment outside the school building The assessment techniques chosen should allow for these varying learning environments

. . . **roles**

5 Role of Assessors

The assessment of a student's behavior in a traditional academic program is provided by four or five teachers—each giving a single assessment related to a specific discipline This is in contrast to an experiential program where a student's teachers include not only the teacher or coordinator from his or her school but also a variety of "teachers" in the work setting which he or she has selected In this case, the assessment of a student's behavior is provided by the individual who is responsible for the student's learning program and with whom the student has spent most of his or her time In the latter case, the

individual many times is not trained in a single area but assumes many roles within the work setting. The individual's assessment is necessarily global and more comprehensive than an assessment of a student in a single academic subject.

. . . focus

6. Focus of Assessment

Traditional academic programs focus on what the student can do as a result of completing a unit of work in a preselected unit of time. A student is assessed on how well he or she scores on a test or performs on a project. Many experiential learning programs, in addition, focus on the process that the student went through. For example, the student becomes more aware of career interests, improves his or her self concept and ability to comfortably and appropriately interact with others, and becomes more responsible for his or her own work. In experiential learning, then, the experience itself and the way the student feels about it may be equally important goals or outcomes that require measurement.

What does all this mean for assessing experiential learning programs? Quite a bit. Assessment techniques currently available were designed to measure student achievement in the traditional academic curriculum. They assume a certain learning environment, a certain learning sequence provided by a known curriculum, and a certain set of prescribed interactions between the student and teacher. Clearly, one must question applying these same techniques to assessing students' learning through experience.

You have just been exposed to:

- the historical underpinnings of experiential learning
- the instructional aspects of experiential learning
- some advantages, disadvantages and unique features of experiential learning and
- some of the difficulties that arise in assessing experiential learning

Now you can move comfortably into the next chapter where you will find different papers that reflect varied viewpoints about assessing experiential learning from the secondary perspective. As you read the papers, try to think about your program and how you can adopt or adapt these ideas for your own use.

CHAPTER 3

ASSESSING EXPERIENTIAL LEARNING : VIEWPOINTS FROM THE SECONDARY PERSPECTIVE

Introduction

Career education has many faces and forms as does experiential learning and its assessment. As you develop and operate your program, you will want to talk with others who are involved in experiential learning in their career education programs and are wrestling with some of the same assessment problems as you are.

In the following pages, you will have the opportunity to learn from a few people who have experience in assessment of experiential learning activities on the secondary level. You will find that their experiences vary as do their approaches to assessment, but this provides a healthy overview from which you can select those ideas you feel can be adapted to your own needs. If you'd like any further information from any of the writers, they are identified at the beginning of each paper, and they welcome your questions or comments. Also you will find an index of the major thoughts addressed by these writers in Chapter 7.

Assessing the Service Learning Experience

by

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Perspective

Nontraditional educational programs seem, by their very nature, to require nontraditional methods of assessing their learning value for the student. Service learning is one type of experiential learning program, and practitioners in the field have developed various alternative methods of evaluating learning outcomes of the service experience.

While secondary schools have developed several different models for implementing and managing student service learning programs, (e.g., integrated within the curriculum of particular course of study, interdisciplinary seminars with service components, service learning with a career education focus) the philosophical concept on which these diverse programs are based is generic.

Robert Sigmon, at the University of South Carolina, has defined service learning as: "The integration of the accomplishment of a task which meets human needs with conscious educational growth." Proponents of service learning, therefore, believe that for a program to be termed service learning it must embody the dimensions of both social service and conscious learning from that experience. Consequently, teachers and others who coordinate such programs must be prepared to help students both delineate their service goals for the community and define their learning objectives for the experience

Further, a balance and an equality must be maintained between the service and the learning components: students must not use the community simply as a laboratory to exploit for learning purposes; rather, they must contribute to meeting the human and social needs of that community. As the students work to meet a human or social need in the community, they gradually assume adult responsibilities while expanding their capacity for learning through doing. If the service learning experience is properly structured, it will enable the student to grow and learn, not only in the skill and cognitive domains, but in the affective domain as well

Problems

Because of the dual yet integrated purpose of service learning programs, i.e., meeting both the student's needs for learning and the community's needs for work to be done, assessments of service learning programs are usually made from both perspectives. On the whole, we have found that if the project does not involve meaningful work—work which has real value to the community—the learning for the student will be minimal. Further, projects and service assignments must be well planned, developed and managed from both the educator's viewpoint and from the community's as well, and anticipated learning outcomes must be articulated at the outset. If the student is placed in a social service agency to carry out a service assignment, it is essential that the student's agency supervisor understand his/her responsibilities to the student for orientation, training, supervision, evaluation and feedback. It is also essential that classroom support from the teacher or seminar coordinator be provided, including leading the student to related readings, discussing theory as it relates to the actual work/service experience, and guiding the student in reflecting on the experience.

Unless these elements are considered and planned beforehand, they can become problematic areas which ultimately will hinder the effective assessment of the learning side of a service experience. If this groundwork is laid for a sound project or placement, for adequate supervision, for well articulated service and learning objectives, and for classroom support, the actual assessment of a student's learning from the experience can then be based on concrete and measurable objectives.

Practical suggestions

Service learning program coordinators have over the years devised various methods and techniques to assess student learning from the service experience. One which I particularly like and use with students who intern with our program is based on a general process that helps to prepare the student for the experience at the outset, enables him/her to process learning throughout the experience, and assists the student to conceptualize the experience at its conclusion.

The cornerstone of this process is the service learning agreement which we draw up during the first week of the internship and against which we periodically assess our progress throughout the following months of the placement. The service learning agreement is tripartite: it must be agreed to by the student, myself as intern supervisor, and the professor or teacher

The student actually prepares the agreement, which is a learning experience in itself, for he/she must become familiar with how to write a purpose statement and

measurable service and learning objectives. The student selects one or more projects which interest her/him and which we need to have accomplished, and prepares objectives for completing the project within certain time frames. Concurrently, he/she prepares learning objectives, in the skill, cognitive and affective domains that may or may not relate to the specific project undertaken, but do relate to his/her purpose for interning with our program. A political science student, for example, may select for a service project the preparation of a technical assistance paper for secondary educators on how to integrate a service component into the traditional social studies curriculum. In addition to the obvious learning objectives associated with such a project, the student may also indicate a desire to learn how a national federal program operates. The measurement of this learning will be the ability to articulate what he/she has learned from the experience which coincides with or varies from theory learned as a student of political science. We help to prepare the student for the experience by providing a thorough orientation to our program and the agency in general, and guide him/her to specific readings and staff that can also provide perspectives for the experience.

Away from the office, the student prepares a daily journal in which is reflected the day's activities and pursues outside readings that relate to his/her broader purpose. In the office, the student participates in decision-making, probing often to learn why and how particular decisions are made, and occasionally challenging decisions and offering alternatives. Periodically, we meet to process his/her experience and to help the student generalize learning from it, as well as to assess progress against both the service project and the learning objectives. The student may be required by the classroom instructor to prepare one or more papers during the term and a final paper at the end that articulates a combination of theory gained through research and its relationship to his/her own experience. At the same time, I prepare an evaluation of the student's service contribution to the program which I share with both him/her and the classroom instructor. Since it is equally important for me to know how to make an intern experience better for future students assigned to me, the student, too, evaluates the experience in writing and in a final debriefing session that assesses the total internship. As we do periodically throughout the term, the final written and verbal assessments are again based on the measurable objectives set forth in our original service learning agreement. We examine whether or not the student has accomplished both the service and the learning objectives of the experience. These final assessments, both written and verbal, are designed to help the student assess the learning and generalize principles from it, while at the same time coming to closure on the experience.

This general framework for a service learning experience can be used in almost any type of service learning program, whether the focus is providing companionship and recreation for elderly nursing home patients, organizing day care centers for preschool disadvantaged youngsters, or helping poor people complete their income tax forms. From the recipient's perspective, particularly when that recipient of the services is in desperate need of human assistance, it is crucial that the student know clearly what is expected and how to provide the service needed. And, when that service is beneficial to someone in real need, the student will often be more motivated to increase whatever skills and knowledge he/she has in order to deliver effective services or produce a sound project that can be used to improve the quality of life for an individual or a community.

Reflections

When I was asked to prepare this paper on assessing experiential learning, I was immediately reminded of a story which Dr. Alec Dickson, C. B. E. of England told during his keynote address at our national conference a few years ago. (Dr. Dickson is the creator of England's counterparts to our VISTA and Peace Corps programs.) He said: "There is a school of which undoubtedly you have not heard—Briary Road Secondary Orphan School. Kids leave this school in great numbers at the earliest age to which they are legally entitled. In fact, they are kicking at the door to get out into what they believe to be 'real life.' And in a recent class of thirty-two, sixteen were involved professionally with the local probation officer. An imaginative handicraft teacher arranged one day to take the whole form to the local hospital. Confronting the class were nine children with congenital spinal injury—children in whom a kind of hinge mechanism in the bottom of the spine has been cranked up at birth. Unless there is a particularly intelligent and successful operation, they deform pretty quickly. There is not much that surgery or medicine can do after that. But here they were, unable to move—terribly immobile, and a nurse had to lift them, to feed, to toilet, to put to bed, for every function. When Mum takes the kid home, she becomes the prisoner of her own child

Then these difficult fifteen year old school kids were told, 'What you see here is a technological problem—they can't move Do you think you can help them?'

Back at school, in the workshop, during the handicraft session, they wrestled with the problem. What material could best be used? What design? In seven weeks time, they returned to the hospital, led by their headmaster. They handed over nine beautifully polished, boomerang shaped trays to take the splayed-out legs of each child. They were mounted on caster wheels, an inch and a half off the ground, so that each kid with his/her fingertips could propel himself/herself in any direction across the floor With the handing over, the Mums were in tears, the children euphoric, the staff astounded, and the fifteen-year-olds strangely silent

The headmaster himself was moved by the impact this evidently made on his difficult young people. He asked a probing question, and got two classically beautiful answers. Why had this made such an impact on them? The first answer: 'Because it's the first bloody thing we made in school we didn't have to take home afterwards.' But the second. 'Because nobody said it was good for us. They said it was serious. Dead serious.'

A Good Learning Contract . . .

by

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Perspective

My introduction to experiential education came through foreign study programs, in which no one pretended that the classroom learning has nearly the educational value as the intercultural living experience For four years, I developed and supervised full time service learning internships at a State College in Maryland and have been in Charleston for a year in a position that combines responsibility for career and experiential programs In Maryland, as chairman of the County Youth Commission and board member of the Youth Services Bureau, and in Charleston as secretary of the newly formed Work Education Council, I have become increasingly concerned with the career preparation of high school students, or rather the lack of it, and the great potential that field experience programs have to address critical problems in education

Most high school students seem to me to be 'doing time," waiting for the irrelevance to pass, not expecting to learn much in the classroom, perhaps correctly sensing that they are there because we, the adults, prefer to have them out of our way, and out of our world Indeed we have succeeded and they are in a world largely their own Within that world they are amazingly mature, with interpersonal sensitivities and ecological concerns that surpass by far the attitudes I and my peers shared twenty-five years ago

Problems

The greatest flaw in this arrangement is that the youth world is so complete and separate that it is extremely difficult to break out of Adults have grown so accustomed to it that they aren't sure they want it changed and most have developed condescending attitudes toward "irresponsible" youth Nowhere is this separation more tragic than in the area of work Youth have great difficulty getting any job at all, let alone one in which they are given any responsibility The transition from school to work has become increasingly difficult

A solution comes quickly to mind simply provide a meaningful work experience for youth while they are still associated with school and thereby break down the barriers

between youth and adults and between school and work. But it is not easy to implement. There are two different worlds with different expectations and different vocabularies. While the teacher smiles hopefully, the employer can't wait to show this unappreciative youth what it means to earn an honest dollar, and the youth is determined to resist any dehumanization through being tied to a machine or forced to obey arbitrary commands. If the youth is interested in changing the system, the employer is equally determined to preserve it by changing the student.

A second problem is that all three participants—teacher, employer and student—often view an experiential program as a short cut. The school is glad to get rid of the student and tends to use the space and the free teacher for other things. The employer brightens at the prospect of cheap labor, and the student is pleased with any opportunity to get out of class, especially if he/she gets money and/or academic credit for it. Any experiential education program worthy of the name will cost more than traditional education in the developmental stage, and at least the same amount when established.

Third is the difficulty of translating experience into education. It shouldn't be so difficult, theoretically, but we have based our education on one type of learning for so long that most of us aren't able to translate experience into learning. If we can't do it, then we can't expect students to do it. I am not referring here to the simple learning from experience that hopefully we all do even when we don't try. Education is planned, reflective, and efficient learning, and experiential education, as part of a school program, needs to be planned, with learning objectives, content and a method of evaluation.

There is a way to skirt these problems, namely to simply provide work experience for the student with no attempt to make it educational. This is better than nothing, and even has certain advantages because it is cleaner and forces the young person to "face up to the realities of the world of work." But it fails to address the serious communication gap between school and work and tends to reinforce that separation in the mind of the student, and allows him/her to avoid the learning possibilities in working.

Practical suggestions

To hit the problem head on, I have concluded that a learning contract, or agreement, which spells out the mutual expectations in advance, makes it possible to assess progress along the way, and do a responsible evaluation at the end, is essential. A good contract has, in addition to all the vital statistics (hours, dates, etc.), four major sections. (1) Learning objectives, (2) Job description; (3) Supervisor's responsibilities; and (4) Formal learning component.

The learning objectives are best written by the student, with some assistance. They can include such simple statements as "How to answer a business phone" or "What a lab technician does all day" or "Whether I want to be a doctor." It has been helpful to me to think of three categories: skill development, knowledge of occupation, and personal implications. The job description is written by the employer, but he/she also needs some help to do more than list the tasks that need doing. Learning opportunities and how responsibilities may increase as the student learns need to be made explicit. The agreement should also list the mode of supervision, with regularly scheduled conferences and definitions of progressive stages of responsibility. Finally the formal learning component needs to be described along with the role of the teacher or program coordinator. Will he/she monitor the placement and visit the work site? Will the student keep a journal, write a paper, do some research, attend a weekly class? Whatever the format, my experience strongly supports weekly contact between student and teacher to discuss how well the learning objectives are being met. Part of the purpose of the program is to raise the level of awareness and openness to learning. A weekly meeting reinforces that. It is also important to identify personality conflicts with employers or fellow workers as early as possible. The easiest way to do all of these is in a regular class setting where a group of students share with each other. They can usually help each other with most of the problems. This provides a continuing evaluation. The teacher needs to keep notes and have the students write their own ongoing accounts of what happens

It is critical that a high level of integrity be maintained, that there be no hidden agendas. The communication gap between educators and employers and between youth and adults makes it easy to get caught in major misunderstandings. Get things written and signed by all parties from the beginning. Then the final evaluation is easy because the objectives are spelled out, and all participants can assess the accomplishment in each objective. It is also easy, relatively, for the student to write a paper on the career implications of this experience, plus a description of the job and the function it performs in the society at large, when the group sessions have helped her/him think these things through from the beginning. In many cases they turn out to be the most substantial papers students have ever written

How do we select good teachers and good employers? Let them select themselves, after you explain the complexity of the design The best employers I find are those whose eyes light up when I ask if they ever considered teaching as a career. The best jobs are those in which the student interacts with a worker who has some decision-making powers and, more impo .ant, has an informal working style that allows for answering lots of questions and demonstrating how things work.

Such a program is obviously intended for high school students and involves more than shadowing or observing, which are appropriate for the middle school level. To be cost effective such a program has to last long enough for the employer to get some benefit from the students, for the teacher to be rewarded for the time spent in setting it up, and for the student to pursue his/her learning objectives to a meaningful set of conclusions. In most cases, a student can benefit more from having a second placement during his/her high school career exploration years. To be worthwhile, I think a placement should be at least four hours per week for nine weeks, but preferably twelve hours a week. In the senior year, a full-time nine-week work experience would be well warranted.

Reflections

For the present, such programs in a few schools for a few students provide an exciting prospect. But what happens when we try to do this for all students, and continue it through the college years? Career education experiential programs have far reaching implications in breaking down the barriers between youth and adult and between school and work place. Many persons admit that we expect too much of the schools, dumping on them the full responsibility for child and youth development. What is implied in these kinds of programs into which an increasing number of us are getting involved, is nothing less than a call to employers to help in the education of youth. It may require significant changes in their ways of doing things to incorporate this into their normal activity, but it would be a healthy kind of cooperation and would significantly assist our youth in their transition from school to work—and to adulthood.

Perhaps You Would Like PIE?

by

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Perspective

In my eight years of high school teaching, I have seen more ano more students become bored, disenchanted, and alienated not only from school, but more drastically, from learning itself or anything that seems to have any connection with it. Our junior and senior high school people today long for some activity to which they can give their hearts. They long for some meaningful involvement to replace the superficiality of television.

Recently, in my educational career, I discovered an avenue of meaningful learning. All I needed to do was give the young people an opportunity to formulate their own learning goals and to gather many of their own learning resources. When this happened, I saw students who previously had violently ignored the school and valuable learning, and had become powerfully interested in themselves and their desires, become interested in other people and their needs, and learning itself. Five years ago, Pius XI High School in Milwaukee, Wisconsin, where I teach, took a serious look at its philosophy and objectives and decided to implement them. We were going to be a person-oriented school, because we believed that every person is different and all students cannot do the same things. We needed to offer alternative ways to use time, alternative methods of teaching, alternative assessment procedures, etc. We needed to become more flexible.

With this flexibility, I found the atmosphere to organize and implement the Project Individualized Education (PIE) program. This was different from the work study programs which existed and even different from the field education courses Pius developed The PIE program looked at education as a whole and desperately tried to integrate learning into quality of life and/or career preparation goals

Although the PIE program is much more than experiential learning, I would like to address myself specifically to this unused well of potential learning, namely, the development of an experiential learning program and the evaluation or assessment of that learning

Problems

Many problems develop when you try to link education and work through experiential learning. All of the people in the school community, especially the administrators, coordinators, teachers, students and community groups or organizations are usually involved in these problems. I boil them down to three areas: security, communication and student interest and concern. If you can answer these needs—and they take on all shapes and sizes—then you have a relatively problem-free experience.

In reference to security, I am not just talking about a feeling of confidence on the part of the student involved, although that is important, too. I am talking also about the physical security of transportation. All the little things that crystallize this confidence must be discussed and dealt with.

This brings us to communication. If you hope to coordinate a program, all the people involved have to know what to expect and who to talk to in time of stress or difficulty. People must begin to deal with the feelings that might surface in the experience. Some group meetings of the students in school help surface and confront such feelings as fear, inadequacy, anger, etc. This also enhances the individual's security, because support and encouragement eliminate much loneliness.

Finally, and extremely important, are the students' interests and concerns. Fulfillment of their needs must be the primary goal in any program of this nature. I have seen too many students harming themselves and the others because they felt used or second class or just part of the furniture in the organization. As a coordinator, you will need to find organizations or groups that will give the students many or most of the following:

- Direct client contact
- New and valuable skills
- Practice in the skills they don't want to lose
- Training in appropriate professional behavior
- Close work with professionals in the field
- Opportunity to test a career
- Experience that may help them get a job
- Greater understanding and development of their own worth and skills

So now that you know some of the general concerns that you might need to respond to, I would like to give you some helpful suggestions for developing such a program and appraising the experiential learning.

Practical suggestions

If you start from scratch in your school, here are two possible roads to take. These will immediately flood you with work—but this depends on the number of students you wish to involve. If you want to start out small, publicize to gain students interested in doing volunteer work or in working with different organizations or at different jobs as part of their high school learning. A small number of highly motivated and interested students who know what they want to experience and learn will usually respond. Your task is then to contact organizations and institutions that might fulfill their learning needs. However, if you want to give many students an opportunity to experience school learning in this way, you must collect some information from interested organizations or groups first. Offering this list to many students will stimulate much more desire and interest than just asking for volunteers.

With either approach the data to accumulate are: planned duties for the students by the agency, purpose of the duties, skill level needed upon entry, attitudes that are appropriate, (e.g., flexibility and enjoyment of older people, being comfortable with the visually handicapped), training needed by the student, time commitment required, degree and nature of supervision needed, and potential supervisor.

The most pressing area of concern for yourself as an educator will be the evaluation or assessment of the individual student's learning. This can be done individually or in a small group with many similar learners. I prefer both means of assessment. Meet with a number of the students every week and discuss their reactions to their involvements and expect them to meet periodically with their supervisor in reference to the contract/agreement that they formulated. Also ask the students to keep a log of experiences, feelings and uncertainties. This gives the student and yourself, or the student and the supervisor in some cases, a basis for sharing ideas, for more effective ways of handling difficult situations, and for letting the student know when something was done particularly well. The educational recognition for this involvement should be credit.

I need to clarify and define the contract/agreement I mentioned earlier I have found this agreement, in written form, to be the most valuable tool in the whole program. This nonlegal document defines the expectations of the student and the supervisor and addresses itself to questions relating to the learning goals of the student At minimum, this document should contain the following:

- Student name, phone number and address
- Supervisor name, title, phone number and address
- Schedule agreed upon by the student and supervisor

- Duties to be performed by the student and the objectives to be met in the performance of those duties
- Nature of the supervision—weekly meetings, daily debriefings, on site
- Nature and schedule of the assessments
- Instructions regarding missed assignments on given days and general reasons for justified absence
- Length of contract
- Learning objectives—what will the student learn as a result of the experience?
- Products—will the student be expected to complete a paper, keep a journal, complete a reading list, etc.?

Reflections

As a final word, the success of the entire program depends on the fulfillment of the student's needs. If you have students who are generally pleased with their own experience—regardless of what the organization or agency may say—you have a successful program.

Serving and Being Served

by

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Perspective

The idea of full time education up to a given age, followed by full time work, is increasingly questioned as appropriate for all young people. Programs which mix schooling with work or service opportunities for junior and senior high school students are essential. I have come to this belief after working at numerous jobs while enrolled in high school, college and graduate school; serving internships; taking three years off to teach in a foreign country between college and graduate school; and spending the past thirteen years arranging opportunities for young people to serve and learn in the Southeast.

As someone who has been lucky to be employed in broker and coordinator roles, I believe there are three key factors involved in developing experience-centered learning opportunities which mix schooling with work or service activities for junior and senior high school students.

- Young people benefit from involvement in productive actions with responsibilities that affect the welfare of others.
- Schools should provide a variety of experience-centered learning options inside and outside the school setting.
- In order to make sponsored experience-centered learning work outside the school environment, there have to be "adult" organizations willing to commit themselves and be involved. Businesses, public agencies, all levels of government and voluntary associations should join actively with schools to provide a wide range of opportunities for young people.

With few exceptions, I rarely meet anyone involved with arranging work-learning or service-learning opportunities who doubts the proposition that young people can be highly responsible for their own learning and intentional actions in the community For those of us in educational

institutions providing learning-and-doing opportunities, I believe our primary charge is how to enable young people "to serve and be served by their very performances in society."

Problems

"To serve and be served by" is the motto used in the programs I plan and manage. With this motto or some other compelling reason to arrange experience-centered learning opportunities for young people, we are often victims of gaps between what we want to happen and what in fact happens in our programs. Our limitations range from inadequate support from principals and superintendents to limited staff resources; from lack of assertiveness among students to community indifference. In many cases limitations stem from a lack of careful examination of the very program design we have created.

Practical suggestions

As an aid to identifying the major elements supporting and hindering our efforts I have developed two simple tools. The "High School Student Option Interest Survey" (see Chart A) can be used to gather information on what your students would want to do if they could decide how to spend their high school years. Two outcomes are predictable if you use this tool. One, students will demonstrate an increased awareness of options and will make noises asking for more options if they are not already available. Two, teachers will be surprised to discover the wide range of interests among their students for how they would prefer to spend their time.

The "Experiential Learning Planning Guide for Administrators, Teachers, Parents and Community Leaders" (see Chart B) can be used to assist in the identification of values and preferences for experiential learning from the point of view of these groups. Students could be asked to rank Chart B and the adult population could rank Chart A. These tools usually raise the consciousness level of the groups you involve and provide direct clues to the types of programs and structures most appropriate in your setting.

If you use these tools, a picture could be drawn of how you might interpret a set of observations. For example, assume 50 percent of the students surveyed were interested in staying in school part time and doing part time service activities either for pay or as volunteers. Also assume a clear majority of parents, teachers and community leaders ranked high their desire for students to "engage in productive action with responsibilities that affect the welfare of others." As a coordinator or planner faced with these data, you could organize a teacher study planning group supported by advisory groups of students, parents and community leaders to examine the service-centered learning literature, explore service needs in the community and begin drafting policies and procedures for a program.

Chart A

HIGH SCHOOL STUDENT OPTION INTEREST SURVEY

Developed by Robert L. Sigmon

If you, as a current high school student, could decide how you wanted to spend your high school years among a number of socially approved options, what would you most like to do?

All the following opportunities now exist in communities around the country Very few communities offer all these options. To assist educational and community policy makers to decide which options might be most appropriate for your community, would you please rank the following options? Place a "1" by the item which best states what you would want to do with your high school years, a "2" by the item which next best states what you would want to do, a "3" by the next, etc Rank order these options with the question in mind, "If I could make my own decision about what to do with my high school years, I would choose to . "

A _____ Stay in high school full time and complete the regular program as it is now.

B _____ Stay in high school part time and do public service work for at least minimum wages in the community for 20 hours a week.

C _____ Stay in high school part time and do volunteer work for no pay 20 hours a week.

D. _____ Stay in high school part time and work on a private enterprise job for 20 hours a week for at least minimum wages.

E. _____ Stay in school part time and work on a special project I designed part time and get paid to do so

F _____ Stay in school part time and take some courses at a community college or technical institute

G. _____ Stay in high school part time and take some courses at a junior or senior college.

H. _____ Prior to finishing my high school requirements, be able to drop out and take a full time job or travel with an option to return when I was ready to

I _____ Join a branch of the military service prior to graduating from high school

. . . . .

* Please indicate your reasons for your number one choice (Remember, no choice is better than any other We're interested in discovering the variety of options students would be interested in if they had choices for their high school years)

_____

_____

_____

* **Please circle the grade you are enrolled in: 9 10 11 12**

* **Please check the appropriate spaces: ☐ Male ☐ Female ☐ Black ☐ Other**

* **Please circle your age: 14 15 16 17 18 19**

Chart B

EXPERIENTIAL LEARNING PLANNING GUIDE FOR ADMINISTRATORS, TEACHERS, AND PARENTS

Developed by Robert L. Sigmon

The idea of full time education up to a given age, followed by full time work, is increasingly being questioned by educators and community leaders. Programs which mix schooling and work or service activities, beginning at an early age and continuing through adulthood, are being initiated throughout the country. No one mix of experiences has proved to be more appropriate than any other yet.

The items listed below attempt to state general learning objectives associated with work-learning, service-learning, or action-learning programs. By rank ordering these general learning objectives, placing a "1" by the item which best characterizes the behavior or attitude you seek for your students, a "2" by the next most significant item, a "3" by the next, etc., you can arrive at data which will aid you in determining a suitable program structure. Each statement should be prefaced by "I want my students to . . . " (Remember, none of these objectives is better than others. We are interested in your judgements about what you think are important learning objectives for your community experiential learning programs.)

A. _____ Explore career/vocational options.

B. _____ Learn how to learn through non-academic experiences.

C. _____ Develop new skills or competencies.

D. _____ Refine and utilize existing skills or competencies.

E. _____ Engage in productive action with responsibilities that affect the welfare of others.

F. _____ Have intensive interaction with adults outside a school setting.

G. _____ Develop personal autonomy for their own learning and doing.

H. _____ Engage in peer group teaching-learning (reflection seminars on experiences outside school and their relationship to personal development and knowledge acquisition).

I. _____ Learn about people different from self (cross-cultural experience).

J. _____ Reflect on personal values and commitment to them.

K. _____ Analyze institutional structures and behaviors.

L. _____ Earn money for personal use.

M. _____ Others (please specify)_____

_____

_____

An important procedure I would pay particular attention to is to make clear distinctions between the work or service to be provided and the learning that is expected to take place. Develop agreement forms for students to negotiate their work or service activity with a community organization. An agreement can be simple or elaborate, but would include statements about what the student is expected to do; when he/she will do it; who will supervise the student; and any special terms and conditions (liability, travel, reports and the like) needing to be clarified. You could also develop an agreement form for stating the learning expectations to be negotiated between teacher and student. Writing and stating learning objectives in experience-based learning is difficult, but it is possible and desirable.

Some questions you can ask students about their own learning are:

- What do you need to be able to do that you cannot do now in order to do the work or service you have agreed to do?
- What do you want to learn from the people and the organization with whom you will be spending some time? About bureaucracy? About some subject? About how you handle yourself in a new situation?
- How will this experience help you sort out what kind of career options are available to you? Can you find ways of discovering what is required to do certain roles?
- What is it you are most excited about finding out?

Students can talk their responses out with teachers and/or write them out Learning objectives, concrete and specific, can be sifted out of the responses students make to these or similar queries and translated into statements such as:

- I will be able to perform/document/identify/ demonstrate
- I will be able to identify ten skills required to be a

The specific plans for both the work and learning activities should be shared openly among the students, the person(s) in the organizations they work with and the teacher. When these certainties exist, the chances for a stimulating and satisfying set of experiences are greatly enhanced for all participants.

Substantial efforts are required to interpret your aims and procedures if you involve "adult" organizations in your community If the organization isolates tasks for students which they are committed to seeing through and at least

one staff member takes a strong interest in both getting the task done well and viewing the student as learner, then two major governing variables have been taken care of in the "out there" setting.

In your efforts to interpret your aims and procedures and what you need from "adult" organizations, be mindful that most of them place a low priority on involving students as doer-learners. They have work to do, services to provide. If we provide able bodies to do work, we create no undue pressure. But when we introduce the idea that we want our students to also be viewed as learners, we create a dilemma for organizations. They generally have no self-image as providing educational opportunities for anyone. It is this fact which makes me want to reiterate the necessity for having your students negotiate work or service agreements based on the agencies' needs and suggestions. This format appeals to their self-interest. But don't forget to also introduce the student's desire to be an active learner in the situation. Pointing out to the agency that they control the work or service gets them interested, and in most cases they will then warm up readily to being interested in the learning dimension.

Reflections

What is at stake intellectually in the questions dealt with in these brief notes is the quest for ways to combine thought and action, theory and practice. This quest is not new, nor will we soon be satisfied with where it leads us. But the quest to find the better ways for the young to serve and be served by their actions and learnings in the world is undersupported now and in need of teachers and coordinators with imagination who can lead schools and communities to accept and prize youth involvement in productive action and learning.

Centering and Venturing

by

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Perspective

Over the past eight years, I have been intimately involved with experiential learning at several levels. On the professional level I have researched, designed, facilitated and coordinated experiential programs in secondary and post-secondary schools in New York, Michigan, Ohio, and North Carolina. I am high on experiential learning because at every level of involvement it has produced satisfying results in three basic areas of human development—personal identity (who), environmental awareness (what), and sense of fit in the scheme of things (where). Experiential learning is empowering An empowerment is what I believe we are aiming for in both education and career development.

Although the fundamental human task of learning from experience is life long, there is surely no time period more important than that of secondary schooling for learning how to do it effectively. It is during these years that discoveries are made which enable one to deal with the who, what, and where questions of life. These discoveries require that a person explore connections or integrations which must be made in three separate but interrelated spheres.

- Internal connections of integrations between such parts of the self as interests, abilities, values, ambitions, life style, beliefs, commitments—enabling one to find a working answer to the question "Who am I?"
- External connections or integrations between such parts of the world as natural reality, political reality, social reality, economic reality and cultural reality—enabling one to find a working answer to the question "What is going on here?"
- Transactional connections or integrations between what is happening within the self and what is happening outside in the world—enabling one to find a working answer to the question "Where do I fit?"

These explorations are, in my opinion, best made experientially. The fact is such explorations and their resulting discoveries are always being made experientially by reasonably healthy people in spite of schools and educators. People had successful careers long before we came along. But I do believe we can facilitate the process by means of carefully planned educational programs.

Experiential learning programs whether internships, work-study, or volunteer services are never ends in themselves. Nor are they simply a means of helping students learn from such isolated experiences. I believe their role is primarily to help students acquire the skills which will enable them to learn from all of life's experiences how to make appropriate connections or integrations internally, externally, and transactionally—now, ten years from now, and fifty years from now. In my opinion, this is one of the most important aspects of career development.

Problems

A major problem I have both experienced in my own programs and observed in others is inadequate goal definition. Experiential learning is powerful stuff, potentially involving nearly every aspect of personal development. A common mistake is to set goals which are too narrowly focused on a particular academic inquiry or career exploration to the neglect of more substantive outcomes relating to self-discovery, environmental awareness and lifelong-learning skills. Since experience is by nature holistic, interdisciplinary, and capable of engaging all our senses, program goals should be worthy of the medium. Particular objectives will certainly include well defined settings and specific learning outcomes. But these should be defined so they complement the overall goal of learning how to make the connections and integrations necessary for personal growth and career development.

Too often goals, even when adequately stated, become merely words on a piece of paper rather than ways of programming ourselves for certain expected results. Learning in the realm of experiential programs seem to be directly related to the expectations of both facilitator and students. Unless goals are translated into expectations they will almost certainly be neglected and desired results will not be achieved.

Another problem has to do with our methods. Frequently they subvert student initiatives which are necessary to accomplish the goals stated above. Communicate with, stimulate, and motivate the learner but never take from him/her the initiatives required in deciding, negotiating, analyzing, reporting, and integrating the learning acquired through experiential programs. Students come to your office asking "What's available?" and right away you reach for your list of agencies. That is a strong indication that there may be a problem with your methodology. I have learned to answer the question "What's available?" with

"The whole world's available, which piece do you want?" We then explore interests, enthusiasms, past experiences, values, and other aspects of the student's uniqueness. Here the student takes responsibility for discovering amidst the myriad of internal and external possibilities the kinds of experiences or field explorations which fit. The analysis is the student's, the decision is the student's, and so the learning will be owned by the student.

I call this process "centering" which is necessary preparation for the "venturing" which will take place later. Like you, I seldom have time to adequately facilitate centering with individuals. So, I do it in optional, experiential workshops made up of about thirty students. The workshops run for a minimum of twelve hours over several weeks. Sometimes centering still produces ambiguous results in terms of concrete experiential goals. When this is the case we find that an inquiry into such printed resources as the Yellow Pages, the Chamber of Commerce Directory of Businesses, and the Directory of Community Services, together with planned conversations with people who share an interest with the student, brings about sufficient clarity to make decisions and take appropriate action. To the extent that students fully participate in this process, they will have acquired knowledge and skills which will serve them throughout their careers.

The same kinds of comments can be made with respect to negotiating arrangements between students, school officials, on-site supervisor, and others who may be involved. As the program unfolds from the centering stage to the venturing stage, the learning process is undermined when students are not major participants in program assessment and evaluation. Facilitate, but do not insulate the student from the process of self-analysis, decision making, negotiating, and integrating the experience. If the student is mature enough to learn from a "real world" experience, he/she is mature enough to fully participate in all the processes connected with it.

Practical suggestions

I am acquainted with many good experiential programs and each is appropriately quite different from the others. Your situation may be still different, but here are a few suggestions you might want to consider as you develop your assessment plans.

As you formulate the behavioral characteristics or changes you desire on the part of your student, e.g , assertiveness, imagination, initiative, inquisitiveness, enthusiasm, sense of direction, etc , make sure these are qualities characteristic of your behavior. If learning a process of making more sophisticated connections and integrations is the most worthwhile outcome of experiential learning, the example of a program coordinator who is modeling the requisite

behavior in his/her personal and professional life will speak powerfully. If you don't want your students to be hung up with the passive "What's available?" mentality—then don't get caught up in that trap yourself. If you, or one of your students, need a certain kind of experience, go after it.

The major indication that meaningful connections are being made, both on your part and on the student's, is enthusiasm. Authentic enthusiasm is a primary assessment tool. Use it in helping students decide what they need to experience. Use it in facilitating site selection. Use it in your debriefing process. I have found enthusiasm to be a much more useful and reliable tool than printed information or intellectual exercises in helping people of any age with their career development.

Finally, avoid the "slot filling" mentality. As much as you can, individualize your approach to experiential programs. Take your cue from the enthusiasm and readiness of the student. As an effective facilitator, you may well have cultivated these characteristics but, unless they are there, you may "place" a student where he/she doesn't fit. And when we do that we are not only manipulative, we are destructive.

Slot fillers usually operate within rigid time frames as well. These too should be individualized. Consider such possibilities as a half-hour interview, a day of exposure to a setting, a week of intensive immersion, or a month or semester of involvement. Will a part-time experience fill the bill or is full-time best? Why not use holiday periods and summers to advantage on a voluntary, no-credit basis? I have been amazed to find how much can be accomplished in a short period of time when there is an appropriate match between inquiry and experience.

Reflections

One of the most frequent comments students make after participating in our centering-venturing program of experiential learning and career development is "Why couldn't this have happened to me earlier?" I hope you are making it happen in your secondary schools and that soon we in the colleges will be enrolling more students who have learned how to learn from their experiences—students who have a clearer idea of who they are, what is going on in their world, and where they fit with their emerging sense of career.

The Community is the Classroom

by

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Perspective

Experience-Based Career Education (EBCE) is an operational expression of the conviction that a comprehensive curriculum exists outside the walls of the school. It assumes that the educational environment can be restructured to take maximum advantage of both the value of direct experience and the special capabilities of community institutions in helping young people prepare for adult responsibilities.

It has been my good fortune to spend the past seven years of my professional life working on the development, testing and implementation of this idea. During that time, I have had the opportunity to observe and participate firsthand with some sixty communities across some thirty different states as they struggled to make experiential education a regular, legitimate part of their secondary schools. The reactions EBCE provokes range from ". . . I have seen the future and it works!" to "I can't believe one really learns public speaking by speaking in public." The fact that very few are neutral in their feelings about EBCE indicates that it goes to the heart of our basic values about what secondary education should be.

My experiences with EBCE have reinforced my belief in the value of experiential education They have also strengthened my conviction that if experiential education is to be an opportunity for any significant number of students, a good deal of attention must be given to its educational integrity In simple terms that means articulating its most important outcomes and assessing how well they are achieved. One of the most challenging aspects of implementing experiential education is that those in leadership positions very often have somewhat vague or even conflicting goals which they hope to meet through an experiential education program. Focusing on important expected outcomes is the only effective way I have found to deal with this dilemma

What are these important outcomes? Perhaps the most significant and overriding one is an integration of work, service and learning for the young person More specific outcomes which should be expected from experiential education include

For Students

- A marked increase in ability to communicate effectively with adults.
- An increased willingness to assume responsibility for their own actions.
- An increased awareness of their career options and of themselves in relation to careers.
- Significant growth in the basic skills of reading, math and comprehension.
- More positive attitudes toward learning (not necessarily schooling).
- A marked increase in awareness of people as a learning resource.

For Parents

- Positive changes in their youngsters' attitude toward work and learning.
- Improved self-responsibility on the part of their sons and daughters.
- Increase in their children's willingness and ability to talk with them about their current activities and future plans.

For School/Community Relations

- Working adults who serve as resource people derive personal satisfaction from their role with students and often gain an increased appreciation of their own jobs.
- Organizations benefit directly from the increased job satisfaction and career awareness expressed by workers who participate as resource people.
- The school gains a broader perspective of the dignity and complexity of all types of work.
- Community members gain in increased awareness of the nature of the learning process and the complexity of the educational enterprise.
- Schools benefit from the community's increased involvement in and understanding of the educational process.

For the Teaching/Learning Process

- Teachers become managers of learning resources rather than just imparters of information.
- Guidance becomes integrated into the instructional act.
- A "clinical" and individualized mode of learning (assessment, prescription, evaluation and integration) is practiced.
- The process skills of negotiation and critical thinking become a way of life for both staff and students.

Problems

The overriding difficulty is that such outcomes are more easily stated than reached. There are several important conditions which communities seriously undertaking a comprehensive program of experiential education must accept if they hope to succeed. These conditions are not necessarily easy to internalize:

- A deep, institutional commitment to experience as a valid, certifiable way of learning is required.
- There must be a willingness to recognize that adults other than professional educators can contribute to learning in the whole range of disciplines, academic as well as vocational.
- There must be a desire to give the learning process and the entire educational enterprise an unusual degree of visibility in the community.
- A willingness to allow students the right to assume real responsibilities and therefore occasionally to fail is necessary.
- Teachers as well as students must have legitimate options as to how they conduct their work.

Without attention to these conditions and continuing efforts to achieve with them, the existing forces of tradition and inertia—in the school, in the work place and in teacher-student relationships—will pull very strongly toward "narrow" activities For example, activities which address only the "vocational" aspects of a job or produce "action learning" projects which do not require the student to go into the community to interact directly with the standards of the adult world will inevitably fail to help students achieve the important integrative outcomes which experiential education is uniquely suited to produce.

Practical suggestions

There are two distinct aspects to successful implementation of experiential education in the secondary schools: the first and most important has to do with the instructional activities, the second with the assessment of outcomes.

Instructional planning in experiential education must be much more than a slogan. The students have to be involved in independent learning, primarily outside the sheltered environment of the classroom. For many youngsters this is their first experience in either of these realms—planning or independent learning. Helping a student learn to play a major part in determining and managing what he or she wants to learn requires perseverance and sensitivity on the part of the instructor. Students' first attempts to articulate what they want and need to know will most likely be halting and general, yet a "program" must be built that is based on clearly specified objectives which are mutually satisfactory and understood. Negotiation, guidelines, patience and practice will, in almost every case, produce the type of learning contract that assures the integrity and integration of learning which are so important. Student participation and feedback through regular sessions, group discussions and journals provide the analysis and synthesis of experience, which is the key to assuring that the work or service experience is generalizable and generalized to the broader realms of various disciplines. Reality-based dialogue which looks at "bad" as well as "good" experiences and at successful and unsuccessful fulfillment of the learning contract is critical, as is the "real world" capability to modify or adjust contracts while they are in process.

Assessment (or evaluation as some say) is only slightly less important to the success of experiential education than instructional planning. People at all levels need to know how things are going, particularly when many familiar "indicators" (time spent in a classroom, textbooks assigned, etc.) are absent. Students and their community instructors must assess achievement of objectives specified in a learning contract; parents and professional educators need to know about overall changes in the student; school administrators and school boards need to know about group progress and community acceptance. All of this must be assessed across the very important dimension of acquisition skills, attitudes toward learning, communication attributes and vocational choice.

The key to providing answers to these questions effectively and efficiently lies in combining common sense and eclecticism. Well written objectives and an understanding of how to use them can provide the more short term, specific feedback that community instructors and students require; selective and intelligent use of "standard" procedures and processes such as analysis of written work, discussion, diagnostic and prescriptive tests will provide answers important to assessing overall changes and progress, and

standardized instruments and survey questionnaires can contribute to knowledge about group progress and community acceptance. These, however, should be supported and supplemented by well thought out and in-depth case studies on a small, random sample of students if the spirit and depth of experiential learning is to be conveyed. The real key is to identify the important questions you need to answer and then use multiple devices to get at them. For the more important outcomes, such as those listed earlier in this article, this multiple approach is critical. Owens, et al. (1975) have described one such approach in rather complete detail in *The Use of Multiple Strategies in Evaluating an Experience-Based Career Education Program.*

Reflections

Experiential education is exciting and has obvious value to many learners. It offers one of the best hopes for bringing an understanding of options and responsibility and a sense of worth and dignity to young people coping with a society where the value of work and the individual seem under constant attack. It is my strong belief that we must "protect" this hope by unyielding efforts to make all experiential education quality education and by aiming for outcomes that are significant, even if difficult to measure. Only such a tack can keep us from squandering a real opportunity for positive educational change.

CHAPTER 4

ASSESSMENT TECHNIQUES FOR EXPERIENTIAL LEARNING IN CAREER EDUCATION

A word to the wise

As career education coordinators and teachers, you are faced with the task of assessing learning that occurs through a variety of experiences ranging from general career awareness activities through specific job-skill training tasks, to comprehensive alternative high school programs. In these situations the students learn by exploring and doing: they engage in hands-on experiences aimed at expanding an understanding of the utility and applicability of "academic" learning and at developing practical application abilities. These kinds of learning experiences do not merely draw upon information processing skills, but rather involve the *total* person—his/her psychomotor skills, sensory perceptions, cognitive skills, attitudes, feelings, and ability to relate to others. As you might expect, there is not a single test that can assess this total learning experience but there are techniques which can help you to assess the various activities that make up learning experiences.

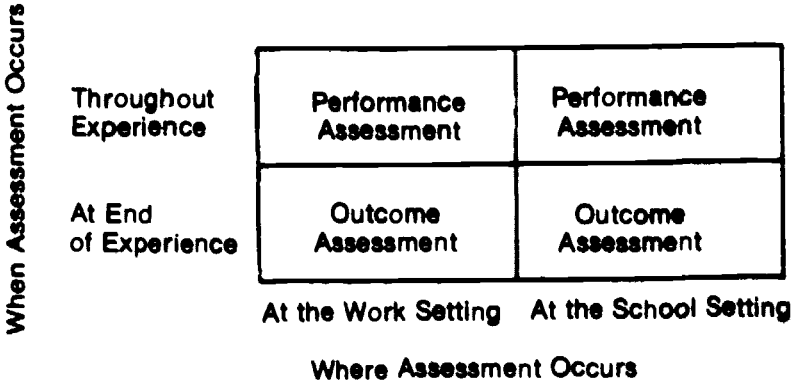
An analogy can be drawn to the doctor trying to assess a patient's general health. A variety of measures can be used—numerical measures such as temperature and blood pressure readings, reflex reactions to stimuli, the patient's own assessment of how he/she feels—all this is sifted through how she/he relates to the doctor. With experiential learning, too, many methods can be used in the assessment. In the following pages are descriptions of some methods that can be used either singly or in combination.

Types of assessment

This discussion will cover two basic types of assessment: performance assessment and outcome assessment. Briefly, you may assess the experience as it occurs, or in a setting that resembles the situation in which a specific type of experiential learning is applied (performance assessment). Or you may assess the experience by means of evaluating the result or end product such as drawings, photographs, or understanding of self, others or societal systems (outcome assessment) The primary difference between performance assessment and outcome assessment then is when the assessment occurs With performance assessment, the learning is assessed throughout the experience. Outcome assessment focuses upon the end of the experience and assumes that the outcome reflects the learning that has taken place.

Another important variable when choosing the type of assessment is where the assessment occurs—at the workplace or in the school. Methods are available to assess the experience either way. These distinctions are summarized in Figure 1.

FIGURE 1
Choosing an Assessment Method Based on Where and When the Assessment Occurs



However, like the doctor who uses multiple measures to determine the health of a patient, the evaluator also seeks to use multiple assessment techniques to (1) obtain a more comprehensive view of the level of learning that has occurred, and (2) obtain more reliable information by checking the information for consistency with different sources. This is known in evaluation jargon as "triangulating the information sources."

This chapter will discuss five methods that may be used to assess experiential learning: direct assessment, self assessment, work sample, simulation, and tests. The following information will be presented for each method:

- A definition
- Data collection strategies
- Strengths and weaknesses
- An example

Assessment methods

The methods discussed in this chapter were selected according to the level of realism present in the assessment. It assumes that assessments conducted at the work setting are more realistic than those done in the school. For example, direct assessment is a more realistic assessment than a work sample because the former is conducted at the work setting while the latter is a re-creation of the work setting. However, the work sample, in turn, is a more realistic assessment than a test because a work sample re-creates the work setting. These relationships are identified in Figure 2

FIGURE 2
Choosing an Assessment Method Based on the Amount of Realism in the Assessment Method

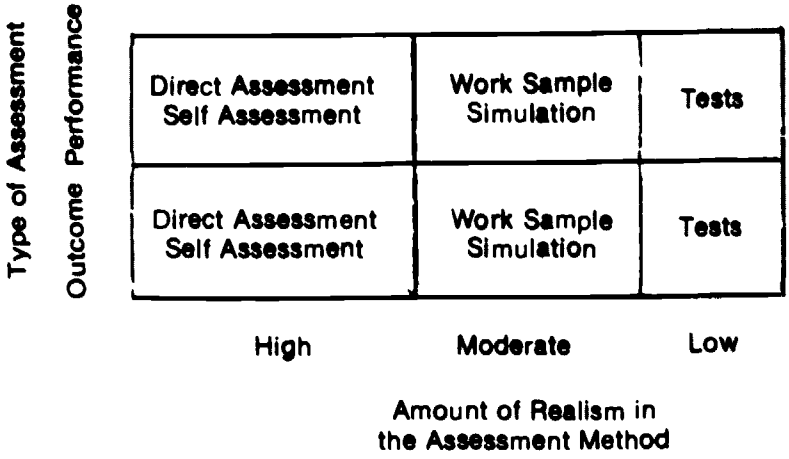


Figure 2 raises three points about assessing experiential learning programs. First, different assessment techniques may be used to evaluate your program. Second, each method has a different level of realism associated with it. Finally, many of the same methods may be used for both performance assessment and outcome assessment.

At first glance it might seem odd to you that performance assessment and outcome assessment use the same methods. If this is true, let's take a few minutes to stop and think about it. Performance and outcome assessment are really just two perspectives for looking at the same question: What (and how much) was learned in the experiential setting? The methods are just tools to answer this question, and they can be "massaged" to answer the question from either of the two perspectives. It's just like taking a trip by car, train, or airplane. Each of the three are transportation methods to get you from one destination to another. The one you choose depends upon your perspective (e g., cost, time available, purpose of trip, etc.). Now we are ready to look at each method to see which best fits your program.

Direct assessment

A definition. A strong element of realism exists in direct assessment because the student's learning is assessed by examining the actual work. Through observation, attention is focused on the work behavior as it occurs at the work setting and/or an outcome that represents the student's activities at the work setting. For example, in order to assess a student's learning of auto mechanics, you could assess his/her performance at a garage or some outcome that represents his/her experience at the garage, such as a repaired distributor.

Data collection strategies. When you want to use the direct assessment method, observation techniques are a relatively easy way to collect information since observing is something we do all the time. By systematizing our observations we are able to get specific evaluation information such as the procedures followed by students in the learning process or the quality of the outcomes produced. Three major types of direct assessment include the use of systematic observation, interviewing, and gathering data unobtrusively.

. . . Systematic observation

To gather systematic observation information about a student's performance, he/she can be periodically observed at the work setting. This can be done in various ways, but the three most common techniques are ratings, rankings, and checklists. While these techniques are dependent upon expert opinion, they are an excellent means of assessing experiential learning. For a more detailed discussion on the collection of systematic observation data see *Using Systematic Observation Techniques in Evaluating Career Education* (Kester, 1979), in this *Career Education Measurement Series.*

. . . Ratings

Ratings, as you might expect from the name, involves assigning numbers to specific tasks required of individuals in a work setting. As students perform their duties an assessor rates the performance levels of the students by assigning numbers to the observed behaviors according to a predetermined scale. For example, "1" might be assigned if the student half-heartedly performs tasks and "5" if he/she performs them in a superior way. Or a "0" might be given for absence of the behavior and "1" for presence of it. Ratings can then be combined within categories for total performance scores. This information might also be placed on a graph and compared with later results. When using ratings, care should be taken to insure that the ratings are not assigned subjectively. One good way to guard against this is to have several assessors participate in the process.

. . . Rankings

Using the ranking technique, a student's performance is shown in relationship to the other people. Using the example described above, the assessors would rank the individuals in the group from lowest to highest on each behavior being assessed. The danger here is that assessors may feel compelled to give each student a different rank, from low to high, even when performances are equally competent. Don't be swayed to do this. Again, care must be taken to avoid bias

. . . Checklists

To use the checklist technique, you will need to list the behaviors you want the students to exhibit and give the list

to the assessors. They in turn observe the student during simulated or on-the-job performance and put checkmarks by the behaviors they observe. The lists are then tallied and composite scores are derived. As with ratings and rankings, care must be taken to insure that you avoid bias.

. . . Interviewing

The student, supervisor and/or coworkers may be periodically interviewed as another assessment technique. The interview could consist of either structured or unstructured questions. It too could be used to rate, rank, or check the individual student's progress.

In cases where products are not readily available, such as an experience as a nursing aide, the interview may be particularly important. Again, a preselected set of criteria should be designed against which the learning could be evaluated. In this case, the interview might include such items as familiarity with hospital procedures, importance of hospital procedures, and an understanding of patient needs.

. . . Unobtrusive data collection

Another direct assessment method to use would be gathering data unobtrusively. For example, the wear and tear on tools or the use of raw materials could also serve as an unobtrusive source or information.

Systematic observation techniques may also be used to assess the outcomes produced as the result of a learning experience. For example, a student submits a sample of work or product created as a result of the experience that reflects the type and amount of learning that took place. You can then assess that learning based upon observing that product against appropriate criteria. For example, if a student is working, exploring or observing in a graphics department to learn about photography techniques, he/she might submit a portfolio of photographs or a paper on photographic techniques. The photographs could then be evaluated according to some preselected criteria, such as the use of light, clarity of the photograph, and the types of subjects photographed. The paper could be evaluated on the depth of understanding about different photographic techniques, the use of different lenses, etc. The successful completion of the product would imply that learning has occurred.

Gathering data unobtrusively may also be used to complement the other two techniques. Let's go back to the promising photographer. Complementary assessment information to the actual photographs might be the total number of photographs taken or the number of photographs he/she developed without assistance from his/her mentor.

Strengths and weaknesses. Direct assessment allows you to assess a learning experience in the setting as it occurs. By using the three complementary techniques (i.e., observing, interviewing, and gathering data unobtrusively) you can create a relatively complete picture of the learning experience. The three techniques are not difficult to learn since you are systematizing something you do naturally. Practice will help you to generate more and more systematic observations. However, direct assessment may be more difficult to use than the other methods which will be discussed because it may require one assessor per student and multiple assessments over time (if you are doing a performance assessment).

An example. David is a high school junior who is participating in a series of short-term work experiences as part of his high school curriculum. At present, David's learning experience is in a library. Let's use direct assessment methods to assess David's latest experience. To assess the experience, we can observe David at the library several times during the time he is there. At the conclusion of each visit, we can complete a rating scale to assess his learning using such criteria as relationship to patrons, accuracy of information provided, cooperativeness and attitude. We can also interview David and the librarian to obtain information about his learning experience such as the tasks performed, areas of accomplishment, and areas that still need to be developed to complete his planned experience. Unobtrusive information could be collected regarding the number of patrons assisted, attendance record, the number of times assistance from other library personnel was required, or the degree to which the learning objectives of the experience were completed.

Self assessment

A definition. Self assessment is a method by which the student judges his or her own level of accomplishment. This method will help you to gain more insight and information about your students and ultimately will make the assessment results more meaningful. It will also help the students to gain more knowledge about themselves. Basically, self assessment can be either of a formal or informal nature.

. . . Informal self assessment

Data collection strategies. On an informal level, self assessment might consist of discussions between the student and his/her mentor. These discussions should be aimed at determining whether predefined learning goals are being accomplished.

A good way to build rapport with students and to encourage informal self assessment is to sit down with them and talk about where they are in relation to their own goals and those of the program. As a basis for discussion, students can keep logs in which they record their progress in relation to given milestones. Daily diaries, in which students describe their feelings about program activities and their thoughts about how the activities relate to their own goals and to those of the experiential learning program, are another good basis for discussion. Many problems can be "put on the table" and the information you obtain from the students will help you to interpret your own assessment measures.

. . . Formal self assessment

There are also more formal kinds of self assessment which can help students look more closely at their attitudes, general levels of accomplishment, and development of specific skills. The three most popular formal techniques are the self inventory checklist, standard self assessment tests, and skill history form.

Self inventory checklists can be used to help students assess their previous experiences and their knowledge and levels of interest in given tasks or fields. You may want to begin your experiential learning program with such an inventory.

As your students gain knowledge and skills in a particular area, it will be useful to you and to them to view their progress in relation to the level of knowledge and skills acquired Standard self assessment tests can be used by the student for this purpose without the threat of being graded. These tests are usually constructed in a multiple choice form. If desired, the student can score his/her own test and discuss the results with you in an informal manner.

If your program is designed so that students learn specific job related skills, then the skill history form is a self assessment technique similar to the inventory checklist. It provides a means for the student to assess previously learned skills in specific career areas. The skill history form also can be used in conjunction with the self inventory checklist

Strengths and weaknesses. Self assessment provides information about the learning experience from the student's perspective over time Thus, it complements other assessment methods The information obtained from self assessment often is insightful and may provide a more complete view of the learning experience over time. However, if self assessment is to be a useful method the student must be given guidance in how to do it For example, students may not be objective evaluators of their own accomplishments, so specific standards should be provided

An example. Tanya is a high school senior participating in an experiential learning program designed to have students learn about organizational leadership as interns to executives in business and government. She is spending this term shadowing the director of the state legislative research office. Since her work assignments have varied from small research reports to answering citizen requests to monitoring legislative committees, it may be difficult to observe her performance or assess a tangible product of the experience. So, the self assessment method might be appropriate. In this case, as part of her experiential learning program, Tanya might be required to keep a log where she records her major daily activities, what she has learned, and reflections on her experience. She also might be asked to indicate the tasks she has performed or be given a problem in which she is asked to provide a correct response from a list of potential answers.

Work sample

A definition. Work sample is a variation of the direct assessment method and is most useful in programs where students do productive work (for which they should be paid) and are expected to learn a specific set of work skills. The major difference between the direct assessment and work sample methods is where the assessment is conducted. Direct assessment is done at the work setting, whereas the work sample is conducted away from the work setting. When time or cost does not permit you to use direct assessment, a work sample may be second best. A work sample attempts to reproduce all, or an important part, of an actual task learned at the work setting. This method uses the same type of equipment found at the work setting. The student might be asked to perform a task learned (e.g., designing a filing system for a set of materials) or analyze a situation and correct its errors (e.g., critiquing and redesigning an existing filing system). Using the filing system example, the student's performance might be assessed against a variety of criteria such as how thoroughly he/she analyzes the office information needs before the filing system is redesigned. However, the result of the work sample, the new filing system, may also be assessed from the outcome perspective (e.g., potential utility of the filing system, the technical accuracy in its construction, etc.).

Data collection strategies. Since the work sample is a variation of direct assessment, some of the same data collection methods—ratings, rankings, checklists, gathering data unobtrusively—may be used.

Strengths and weaknesses. When time or cost do not allow for direct observation, a work sample may be designed that represents that learning situation. However, it may take

more time to arrange an appropriate work sample than to do a direct assessment. The usefulness of a work sample is directly proportional to how well it represents the actual learning at the work setting. To be useful it must be based upon the objectives of the learning experience. Second, it should be representative of the type of tasks the student performed at the work setting. Third, adequate equipment and time should be provided for the work sample chosen. Next, the evaluator of the work sample should have criteria against which to rate the student's learning. Finally, the work sample should be tried out (or pilot tested) on experienced individuals to detect any problems.

Even with these caveats, it must be remembered that a work sample is a representation of what occurred in the learning experience—you are not assessing the experience in the actual learning situation. In addition, the work sample primarily relies upon one systematic observation technique—observation. Although the assessor may gather unobtrusive information (e.g., the number of different ways the student began to design the filing system before deciding upon one to completely design) the work sample is not conducive to collecting interview information from the student's supervisor and/or coworkers.

An example. Manuel has participated in a career exploration program and has decided that his career interest lies in repairing communication equipment. He now attends school in the morning and works repairing communication equipment at the local university in the afternoon. Since it has been determined that direct assessment of Manuel's experience at the work setting is not possible, we have decided to assess his experience through a work sample. Using the same kind of equipment that Manuel usually works with on the job, we can create a work sample away from the work setting and ask him to diagnose problems with some communication equipment and make the appropriate repairs. We could then assess his experience by using systematic observation techniques. His work sample might be assessed against such criteria as the speed of diagnosis, the efficiency of the repair and/or the adequacy of the repair.

Simulation

A definition. Simulation asks the student to pretend that he/she is engaged in some real task. The simulator used in driver education classes is a common example of a simulation. Like a work sample, simulation is a modification of the direct assessment method. However, while a work sample assesses tangible skill performance, simulation can also address the measurement of attitudes, motivations, personalities and social skills which interact with aptitudes to get a job accomplished. Since a simulation is made up of many interrelated actions and reactions, it is a way of looking at the total picture of real life performance, not merely assessing the separate skills or personality traits that make up the total picture. For example, a simulation may be used to measure leadership ability or decision-making skills

A simulation may take several variations. One variation is the paper-and-pencil simulation. Simulations in this group include a case study (where the student writes an analysis of the assigned problem in a specific period of time) and an in-basket test (where the student is asked to solve the problem described in memos and correspondence found in an in-basket). Non-paper-and-pencil simulations are ususally concerned with interpersonal relationships and personal behavior. Some types of these simulations are leaderless group discussions (where students assume roles and find a solution to a problem through discussions) and simulated interviews (where the student plays roles during the interview and the assessor either plays an opposing role or rates the players while observing the interview).

Like a work sample, simulations are usually used to assess learning from the performance perspective. However, they may be used to assess a student's learning from the outcome perspective. For example, if you were to use the in-basket method to assess a student's learning of administrative skills, you could look at the method of disposition of the in-basket items (performance perspective) and the final result, such as the percentage of items addressed, delegated, and discarded (outcome perspective).

Data collection strategies. Since simulations are modifications of the direct assessment method, systematic observation techniques (primarily observing and gathering data unobtrusively) may be used to collect information.

Strengths and weaknesses. Simulation will allow you to assess learning that involves complex qualities such as motivations, attitudes, and social skills. This type of information may not be gleaned easily from the other methods. Simulations have other benefits such as low cost, the opportunity to develop standardized assessment instruments over time, and the opportunity to assess the student without interrupting the work setting. For the assessment to be meaningful, it must be carefully designed. Like a work sample, it must represent the learning situation in the work setting. Adequate equipment and time must be provided for the simulation chosen, criteria should be established to assess the student's learning, and the simulation should be pilot tested to detect any problems before it is used.

An example. Shandy is in the tenth grade and is not succeeding in her high school program. As a result, she is now enrolled in an experiential learning program which consists of classes in such areas as basic academic classes, career awareness, self-awareness and a two week experience in a work setting. Shandy selected the information office of the city personnel department as her work setting. Since her main observations have been associated with discussions about job openings with applicants, we have decided that a simulation might be an appropriate way to assess her experience. To do this, Shandy could be given a

list of open employment positions in the information office. Then we would simulate the interview process by having different people with different employment histories apply for positions. Shandy's performance may be assessed against such criteria as her ability to communicate and to match an individual's previous experience, aptitudes, attitudes and job autonomy desires with existing openings.

Tests

A definition. Tests are the least realistic way of assessing a student's learning in an experiential setting. However, there are times when some aspects of experiential learning may be assessed by administering tests. For example, you might use tests to assess knowledge of basic facts when it is impractical or economically infeasible to use other methods or you might find that time, space, and the breadth of the subject matter makes it desirable to use tests on self concepts, locus of control or attitudes in concurrence with the measurement of selected standards or instruments. Tests are especially effective when used in conjunction with other kinds of measures to help verify the information you collect.

Data collection strategies. Several types of tests are available. These include matching tests, true-false tests, completion tests and essay tests. The education literature contains many works that describe these different types of tests, their uses, construction, and pitfalls.

Strengths and weaknesses. The use of existing valid and reliable tests may be the least expensive way to assess a student's performance. However, as mentioned above, they are also the least realistic. Therefore, they should seldom be used as the sole assessment measure. When used in conjunction with another method, the information obtained through tests can be complementary. But you should be reminded that most written tests are highly dependent upon the student's vocabulary, writing ability, socio-economic status, sex and maturation. Also, for a test to be useful in assessing performance, it should be administered prior to and at the end of the learning experience in order to gauge the student's growth

An example. Danny is a high school dropout who now participates in an experiential learning program that offers remedial education and part-time work experience. He has been spending the last few weeks working at a senior citizens center as a nutrition aide Although we will be assessing his experience by observing his work and reviewing the meals he plans, he has had to learn a lot of basic information about biology and nutrition Thus, we might also use a written test to determine how much formal knowledge about biology and nutrition Danny has learned during his experience by administering a test prior to the experience and again at its completion

Two other factors

We have just discussed five methods that can be used to assess experiential learning programs. The choice of the method or methods used is up to you. However, before you make a decision, there are two other factors that should be kept in mind: triangulation and program outcomes.

. . . Triangulation

Triangulation is simply the process of obtaining information from several different sources (e.g., student and supervisor) or from the same source (e.g., student) using different methods. The purpose behind triangulating information is verification. Although we have placed a formal name on this process, we verify information daily by triangulating. For example, we often solicit opinions from several colleagues in order to gather their viewpoints and to determine if there is a consensus of thought. Another example is adding a long column of four-digit numbers. We may add the numbers from the top down and then from the bottom up to see if we arrived at the same totals. In the first case we sought the same information from many sources. In the second case, we used two variations of the same method to determine if our finding was accurate.

As with all types of assessment, triangulation is very useful when assessing experiential learning programs. It is also not very difficult. If you want to assess performance, you could triangulate your information by using direct assessment, self assessment and tests. Or you could use direct assessment several times. From an outcome assessment perspective, you could use both direct assessment and tests. Another route to take is to triangulate your information by doing both performance and outcome assessment. The information you obtain by using one method from each perspective will help you to verify the findings.

. . . Program outcomes

The program outcomes will help you to decide the perspective and methods you will use for assessment. Different assessment methods are better suited to different outcomes. For example, tangible skill development may be most easily assessed by direct assessment and/or tests, while more complex behavior may be better assessed through simulation The point to keep in mind is that experiential learning programs have multiple outcomes. The one outcome or combination of outcomes you want to assess must be determined before you select assessment methods Figure 3 attempts to illustrate this relationship by identifying three potential outcomes job skill development, career development and personal growth All three outcomes may be evaluated from the performance and outcome assessment perspectives However, some methods work better with one outcome than another Please remember that Figure 3 is an interpretation Just because a method is included in one box does not mean that you cannot use it to assess a different outcome It is just a guide

FIGURE 3
Outcomes and Assessment Methods

Outcomes

Assessment Methods (Outcome Performance)	Job Skill Development	Career Development	Personal Growth
	Direct Assessment Simulation Work Sample Self Assessment	Direct Assessment Self Assessment Interview	Direct Assessment Self Assessment Simulation Tests
	Direct Assessment Work Sample Tests	Direct Assessment Interview	Direct Assessment Tests Simulation

Four questions to consider

Before you continue, this might be a good time to pause and think about the information you have read and its relationship to your program. Below are four questions to consider as you develop your assessment strategy.

Are you interested in assessing the learning from a performance perspective and/or an outcome perspective? One thought that undergirds this chapter is that the performance and outcome perspectives are two sides of the same coin, or two ways of looking at the learning experience. And from looking at the program from two perspectives, you get a more complete picture of the learning experience.

Have you considered the methods appropriate for each perspective? This chapter was filled with methods that can be used to assess the learning experience from both perspectives. When reviewing these methods, several points come to light. First, many of the same methods can be used whether you assess the program from the performance or outcome perspective. Second, the amount of realism varies with each method. The most realistic method is direct assessment (e.g., observing, interviewing, gathering data unobtrusively). When direct assessment is not possible, it may be adapted by using work samples or simulations. Tests are the least realistic method, but they do complement the other methods.

Did you consider the program outcomes when you designed the assessment? Experiential learning programs have different intended outcomes. These might include job skill development, better career decision-making capability and/or personal growth. Some methods better fit one outcome than another. For example, Figure 3 illustrated that interviews may be used as the major measure for career development while tests may be more useful to measure personal growth.

Have you considered verifying your information? Information is not terribly useful unless it is accurate. One way to verify your information is to assess the learning experience by using more than one method. Thus, you can use two methods to measure performance or two methods to measure the outcome, or one method to measure performance and one method to measure the outcome. This is known as triangulating.

These questions and other issues that affect the assessment of experiential learning programs are summarized in the checklist below. The checklist is designed to be a quick review of the issues—not a substitute for the text. So, while you are designing your assessment strategy, the checklist can be used as a guide so that major points are not forgotten.

Checklist

	Yes	No
Have you determined:		
1. If you will assess the program from a performance and/or outcome perspective?		
2. Which methods you might use to assess the performance?		
3. Which methods you might use to assess the outcome?		
4. Which assessment methods are the most feasible for you to use given program constraints (e.g., time, cost)?		
5. If the assessment methods chosen best fit the program goals?		
6. Which combination of methods will help you to verify the information collected?		

An Illustration

We have just discussed assessing experiential learning by five different methods: direct assessment, self assessment, work sample, simulation, and tests. We have also discussed the issues of triangulation, outcomes and four general questions to consider when designing an assessment strategy Most of these methods may be used whether you assess the learning experience from a performance perspective or an outcome perspective The method(s) selected are up to you depending upon what you want to assess (the performance or the outcomes of the program).

the assessment setting (at the work setting or in the school) and the resources available for assessment (e.g., time, money). This section will indicate how you might assess the same learning experience from both the performance and outcome perspectives using the methods we have discussed. Please bear in mind that this is only an illustration. If you were to use all of the methods in your assessment, you could end up with more information than is needed. For example, a work sample is a modification of direct assessment. If you can actually observe the process or the outcome, you need not reproduce it in a work sample. With this caveat in mind, let's look at an illustration.

An Illustration

During her junior year in high school Susan participated in a career exploration program. She has decided to spend the spring semester of her senior year in the experiential learning program. After discussing her interests and available work sites with the program coordinator, and since she is interested in helping children she has decided to work in the city's head start program as a teacher assistant. It was decided that there would be two primary outcomes of Susan's experience. First, she should be able to tutor children, and second, she should be able to interact more comfortably with adults. Susan's major responsibilities include assisting the teacher. In addition, she often works with small groups of children by herself to reinforce the topics discussed in class

How might Susan's program be assessed? As you read this short scenario, several ideas probably came to mind The method you use to assess your experiential learning program will depend upon several factors We have discussed several, including

- Perspective you wish to assess
- When the assessment will occur
- Where the assessment will occur
- Triangulation
- Program outcomes

In addition, the papers in Chapters 3 raise other issues for you to consider The choice of the method or methods is up to you

On the following page, space is provided for you on Worksheet 1 to jot down your assessment ideas for Susan's experiential learning program in the head start program. Feel free to refer back to the various sections in this chapter for information as you complete this section. When you have finished, turn the page and you will see how we tackled the problem. However, don't forget that our solutions are not necessarily "the best" since there are no right or wrong answers. They are only suggestions.

Worksheet 1
Assessment Strategy: Susan's Experiential Learning Program

Performance assessment. From this perspective I would like to use the following assessment methods:

Direct assessment

Self assessment

Work sample

Simulation

Tests

Outcome assessment. From this perspective I would like to use the following assessment methods:

Direct assessment.

Self assessment

Work sample

Simulation

Tests

Completed Worksheet 1
Assessment Strategy: Susan's Experiential Learning Program

PERFORMANCE ASSESSMENT. From this perspective we would like to assess how much Susan has learned at her work setting and how her performance has improved over the spring semester.

Direct assessment. Susan's learning may be assessed through a series of observations by both the classroom teacher and the day care center personnel. Her performance could be judged against such criteria as her ability to transfer information to the students, her ability to organize the materials she teaches, her poise and confidence, etc. The observations may be complemented by (1) interviewing Susan, her supervising teacher and perhaps some of the children and (2) gathering data unobtrusively (e.g., Susan's attendance record at the head start program).

Self assessment. Since we cannot observe Susan's work on a daily basis nor assess a work sample on a daily basis, Susan has been asked to keep a log of her daily experience, with comments on what she learned. A review of this daily log will present an overview of Susan's experience, what she felt was important, and what things she felt she learned. The log can also help to determine the progress she has made on her job.

Work sample. If it is not feasible to visit Susan at the day care center, a group of children may be brought to her school to simulate the day care center Once the children are present, Susan's experiences may be evaluated using systematic observation methods—observing and gathering data unobtrusively

Simulation. The simulation might be used to assess the more complex aspects of the experience. For example, a "no risk" interview may be used where the program coordinator might play the director of a day care center and Susan plays a prospective teacher The interview would center on Susan's ideas about teaching young children In addition to assessing the subject matter, other qualities such as responsibilities, persuasiveness, logical conversation under stress, and demonstrated listening ability may be rated

Tests. A written test may be periodically used to determine the cognitive attitudinal gains Susan has made Items might center around child development, learning theory, self concept and locus of control

OUTCOME ASSESSMENT. From this perspective we would like to assess how much Susan has learned in the program by looking at the outcome, assisting children.

Direct assessment. Susan has been asked to submit all of the materials she developed herself and all of the materials she used as a teaching aid. The materials would then be rated as to their originality, appropriateness, and content. She also has been asked to submit class projects she helped the children complete and include an explanation of her role. Regarding these projects Susan and her supervising teacher may also be interviewed to determine the utility and appropriateness of the materials.

Self assessment. Susan can be asked to rate the degree to which she is satisfied with her level of competence in caring for small children. Another technique that could be used would be to ask her to prepare an essay on the satisfaction she receives from her work as a head start teacher assistant.

Work sample. If we were not able to visit Susan periodically at the day care center, we may choose to design a work sample to assess her experience. Although a work sample generally is used to assess performance, we may also assess the outcome of the work sample. To do this, systematic observation techniques may be used, such as talking to the children at the end of the work sample.

Simulation. In order to assess the more complex aspects of Susan's experience from an outcome perspective, a simulation may be used. Using the example of the "no risk" interview which we might use for the performance assessment, we can carry it one step further and use it as an outcome assessment. For example, after the interview is completed, another "director" might decide whether or not to hire Susan and explain the reason(s) behind the choice.

Tests. The tests we will administer to Susan throughout the experience may be administered once more at the end of the spring quarter to determine her overall knowledge about child development and learning theory The final test scores may be compared to the earliest test score to determine what she has and has not learned from her experience

Where do you go from here?

Now that you have had a basic introduction to experiential learning, its departures from and similarities to traditional learning, some techniques for its assessment in career education, and viewpoints of assessing experiential education from the secondary perspective, you should be able to adopt or adapt techniques appropriate for your own program use. Below are a few guidelines to consider as you develop your assessment program.

. . . Students

Your students' socioeconomic, racial, and ethnic backgrounds; sex; maturation; and previous experience in career education should be considered when you are selecting assessment techniques. Assessment can be a learning tool for both you and your students if measures are appropriate for the students.

. . . Learning outcomes

Take care to clearly identify the outcomes you expect to achieve in your program. Make sure that they are appropriate for the students and that the learning tasks are designed to produce those outcomes. And be sure your students understand what they are expected to achieve.

. . . Feedback to students

Daily or weekly feedback to students of your assessment results is extremely important. The students' increased awareness of their competency levels will make it possible to choose career alternatives on a sound basis.

. . . Communication with others

Although you may be working in only one program, don't limit your awareness to what is going on in your own program. Talk with others who are involved in experiential learning programs. Find out what they are doing. You know the cliche . . . "Two heads are better than one." Perhaps three or more are even better! In the meantime, some "others" are waiting to talk to you in the next chapter. They represent a perspective of assessing experiential learning as seen by personnel in postsecondary agencies.

Planning an assessment strategy

Before you turn to Chapter 5 and begin reading the papers from the postsecondary perspective, take a few minutes to organize your thoughts about assessing experiential learning by applying the information in this chapter to your own program. We know that this is not an easy task since many factors will affect the assessment strategy you choose. To begin with, you will find Worksheet 2 on the next page. The worksheet contains some factors that you should consider when designing your assessment strategy. However, since each program is different only you know which factors are applicable to your program. So we have left space for you to "personalize" the worksheet. We hope you find it to be a helpful way to collect your thoughts.

Worksheet 2

Factors to consider	Rationale
1. What assessment perspective will be used (performance or outcome)?	
2. Where will the assessment occur?	
3. When will the assessment occur?	
4. What methods (direct assessment, self assessment, work sample, simulation, test) will be used to assess the performance? outcome?	
5 Do the methods selected best fit the program goals?	
6 Are the resources available to conduct the assessment?	
7 Will the evaluation data be reliable?	
8 Will the evaluation data be valid?	

CHAPTER 5

ASSESSING EXPERIENTIAL LEARNING : VIEWPOINTS FROM THE POSTSECONDARY PERSPECTIVE

Introduction

As we have seen in Chapters 3 and 4, there are many ways to assess experiential learning programs, and the people working in the secondary area have varied viewpoints. Experiential education is also being used as an instructional method on the postsecondary level. They too are trying to determine some of the best ways to assess experiential learning

In order to acquaint you with the current thinking in this area from the postsecondary perspective, we have assembled papers that represent the viewpoints of several people working in the postsecondary area. You will find that although their viewpoints vary, the papers provide an overview of ideas about assessing experiential learning. If you'd like any further information from any of the writers, they are identified at the beginning of each paper, and they welcome your questions or comments. The major ideas addressed in these papers are also indexed in Chapter 7.

Observations on Experiential Learning In Career Education

by

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Perspective

My own perspective on experiential learning has evolved as a result of three major "experiences." First, once I began to work—at a series of exciting, though initially confusing positions—I felt enormous gaps in my earlier formal education in a highly academic university setting. Much as I appreciated my education, I felt strongly that I would have been much better prepared had I had some career exposure and some experiential learning opportunities. In 1970, after several different work experiences, I moved to my present position at LaGuardia Community College where I worked to design and build into this new college a comprehensive experiential and career education program (cooperative education) required of all students—in this case an urban, low income open admissions population. My work at LaGuardia led me to involvement at a national level in the broader experiential education movement in higher education, where I have had considerable exposure to assessment issues and to the diverse problems of the full range of postsecondary institutions in grappling with experiential education.

Such experiences have certainly helped to form my own perspective or, if you will, "biases." Primarily, I am a strong believer in liberal or general education, and I feel very strongly that experiential learning is a key part of general education. To me, it is an essential piece of a balanced pedagogical strategy: it formally recognizes that people do learn through experience, as well as through books and classrooms; it helps build learning skills pertinent to experience; it facilitates students' integrating classroom learning with experience, testing out or observing the reality of academic concepts, it helps ensure that the primary purpose of education is met by clarifying whether students can functionally use classroom learning in their lives as informed citizens, effective workers, and social beings

My own work experience has tended to orient me toward questions for providing experiential learning for students who are low income, typically "educationally disadvantaged," unassertive in the classroom or work place, and

quite unsophisticated about the world. Thus, while I believe that experiential learning is appropriate for all populations, I, myself, have focused on developing it as a strategy for social and career mobility.

Regarding assessment—the topical concern of this handbook—I would tend to emphasize the importance of setting objectives. In order to develop appropriate assessment techniques, it is essential to be very clear about your programmatic objectives. Are they primarily to provide career exposure, to promote personal development, or to reinforce classroom taught skills? Good teachers inevitably have good assessment capability: the problem is usually defining what one is assessing.

Problems

As my "biases" indicate, a major problem area in experiential learning programs is defining the program's objectives. Then, the related problem is ensuring that the program's components are consistent with its objectives. Permit me to illustrate briefly, drawing on my particular experience in a cooperative/career education program. Perhaps the most common problem, I find, derives from inconsistencies between a program's objectives, e.g., to provide exposure to different career options within a field, and the needs of the employer or firm.

You may aim to have students spend a few days in each of several departments to observe different operations and types of personnel. The company, however, may find this pattern disruptive and be interested only in students who are not merely observers but who can "do something" and who can be reasonably productive.

This problem can often relate to another, that of time frame. The school's administrative needs may indicate a field placement which occurs after 3:00 p.m., while the cooperating firm finds those hours difficult. Teachers may hope to have students observe certain career roles in certain sequences to correspond with their course plans, but the sequence may not be realistic for the employing firm. A school serving, for example, upper middle class students may want them to spend a brief period working on an assembly line, but these students relate poorly to the line workers and create many attitudinal problems. In short, there is an overarching problem of developing a workable system, which has many different and often conflicting parts.

Practical suggestions

The best advice I can give is to be systematic! Think through your entire program, its objectives, your institutional characteristics, strengths and limitations, your staff, your potential resources, cooperating firms for providing experiential learning, and your capacity to individualize and monitor a program. Let me suggest some specific points.

1 Clarify your rationale for offering an experiential program and develop a statement of your philosophy

2. Define the educational objectives which you hope to achieve, e.g., career exploration, personal testing or survival, cross-cultural exposure, and work experience. And don't overlook your students' own learning objectives.

3. Define appropriate experiential learning setting or field placement. In considering whether a factory, a summer camp, a local supermarket, a political campaign or a Mayan ruin is "appropriate," you have to examine several different subpoints: how much staff support is needed (and can be provided) to monitor the learning; who your students are and what they can handle emotionally, financially, intellectually and technically; what time frame is best for the field experience for you, your students and the field institutions, e.g., summers, after school, alternate weeks, one or two weeks during the school year; and as suggested earlier, the needs, constraints and expectations of cooperating agencies.

4. Develop your field placements or sites for experiential learning. This typically requires a number of related steps: identifying potential placement opportunities; identifying and, as may be necessary, training staff to develop placements; using a whole range of negotiating and selling skills to obtain the placements you want; establishing linkages with individuals or associations which can help; confirming specific arrangements with the "employer" of your students; maintaining relationships with and meeting the needs of your "employers" over time to ensure the viability of the placements.

5. Select and prepare students for your program. Which students do you intend to serve in this program? All? Certain groups? Only those highly motivated toward the program? Whichever, you need to define your criteria and, as necessary, recruit or develop selection procedures Once you have your student group, you will need to prepare them for a learning experience which may seem very strange to them and which is most likely quite different from other school-associated learning You will want to orient them to the program and its objectives and perhaps teach them observational logkeeping and other skills appropriate to experiential learning You will want to alert them to the importance of interpersonal relationships and to the perceptions and needs of the people or agency with which they will be involved You will want to help them to anticipate problems, difficulties and change Finally, if an interview or application is necessary, you will want to help them prepare it

6. Place your students carefully, sensitively according to their needs and the needs or demands of the agency or field setting. If you are dealing with a large number of students, this may require developing an organized matching and placement process.

7. Structure and monitor the students' experiential learning. Don't just assume it will happen. Accompany or visit your students. Make sure that any agency supervisor is well apprised of and supportive of your program.

8. Assess your students' experiential learning. Determine in advance what you will assess, which may include unanticipated learnings. Be realistic about what learning will be obtainable in particular settings. Gauge the level of performance or learning you expect for your learning objectives. Engage the student in the assessment process; give him/her self-assessment skills and thus greater ownership of the process. Use assessment techniques which are appropriate to the kinds of learning and, wherever possible, use techniques which, in themselves, further learning. Any number of techniques can be useful for assessing experiential learning: thoughtful paper and pencil tests are familiar and often helpful; simulations can deepen student learning and permit you to observe the way students function; similarly, on-site observations provide excellent data, as do evaluations by site supervisors; assessment of "products" of the experience (a piece of pottery, a set of campaign flyers, a lesson plan from a pre-school arts and crafts session); evaluation of journals or logs kept; interviewing by individuals or panels (which may include faculty, "experts" or other students).

Reflections

Most of my "practical suggestions" have been to the "nuts and bolts" of experiential programs. I would like to conclude with a few more general, if somewhat random observations.

On the one hand, I would like to stress the need for us, as educators, to develop thoughtful, constructive programs. This includes the need to develop a conceptual framework and in turn a curriculum to guide an experiential program. Such a curriculum should help students to learn about career, personal, and functional roles, as well as work and lifestyle values, and the impact of interpersonal skills in both their own and others' lives. These learnings are central to experience and life success and are too often overlooked in most textbooks and organized curricula. Relatedly, we can use experiential learning to help students develop a genuine respect for people with different backgrounds, skills or values. Too often, academic perspectives ignore or denigrate work and the business world. Here, we need to search our own values and biases

I would also like to reiterate what I see as a key underlying value of experiential education: that is, that it inculcates an approach to life which stresses testing out one's assumptions in the exacting crucible of experience and which encourages a continued interplay between experience on the one hand and reflection and study on the other—a continued mix, not a sharp demarcation between schooling and one's life career.

Internships and Assessment

by

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Perspective

In 1970, I helped organize Off Campus College (OCC), a student service unit of State University of New York at Binghamton. Students who do not live in dormitories are OCC's primary constituency. In order to build effective service programs for off campus students, we had to court key community people—the local public defender, food stamp administrator and others. For the past five years, OCC has used those contacts to put together academic programs. Community professionals teach OCC-sponsored courses in their fields of expertise, e.g., "The Administration and Distribution of Justice in Broome County" is team-taught by the local district attorney, public defender and two other lawyers, and approximately thirty local agencies each semester, including again, the public defender's office and host student interns.

The internship program is the most difficult program I administer. Each internship is as fragile as an orchid. We've found that excellent internships happen only when a complex series of things happen simultaneously, for example, when the internship is as good for the agency as it is for the student. We've found that internships, even ones which have a history of success, fall apart often quickly and for many, many reasons: the program requires relentless monitoring and an unfailing high level of commitment from every participant.

The internship program also is the most rewarding program I administer. I get a certain joy from helping to break down barriers between a learning institution and surrounding institutions, and from exciting "traditional" teachers in outside-the-classroom learning. But a greater joy is to see what happens to students engaged in experiential learning. They change and blossom! Many gain self-esteem: "I've got a sense of being valuable, actually being able to help other people," writes an intern at Broome Legal Assistance Corporation; "I think I have the confidence to speak to a group," writes a Planned Parenthood intern. Career choices are made or tested, discarded or reinforced. And the experience itself is *valued* and appreciated by students

in ways that exceed by far their appreciation of traditional classroom situations. You are lucky to be involved in experiential education programs, I think, especially if you value and want to be near student growth.

Problems

Institutional commitment to experiential learning. As an experiential learning coordinator, you have to make school decision-makers realize that your program, if it is to work well, needs adequate resources. Frankly, experiential learning programs are, almost without exception, more expensive in terms of teacher time per enrolled student than traditional learning programs. This fact has to be understood and accepted by those who control the resources you want. Don't court disaster by trying to operate on a wing and a prayer. If you need (and you probably will) a certain number of teacher hours for experiential learning supervision or integration, push your principal to give them to you. Even better, push for these hours not as a duty imposed on top of regular teaching schedules but in conjunction with reduced responsibilities in traditional learning situations for those colleagues whom you tap as experiential learning supervisors. If you want to get—and keep—your program off the ground, your institution has to reorder some of its priorities and funnel appropriate resources your way.

Your relationship with the community agencies and/or individuals hosting students in your program. It is easy to expand an experiential learning program with a good reputation in the community and very difficult to keep afloat a program in which even a few connections between sponsoring and host institutions turn sour. You will have not only to watch these connections with an eagle eye but also to figure out short and long term ways for the program to "pay off" for host institutions and individuals. You shouldn't, I believe, base your program on the altruism of these individuals and institutions.

Assessment of experiential education as an extension of the ideology of experiential education. It is wrong and counter productive, I think, to assess student performance in experiential education programs in the same way as traditional educators assess traditional education. Since we're talking after all about experiential education, doesn't it make sense to have the students themselves heavily involved in their own evaluation? And, since I understand two goals of experiential education to be (1) the exploration of career and other options in an atmosphere free of punitive measures and (2) the exploration by individuals of their own (unique) potential, does it make sense to use a traditional, competitive grading system here? Why not let the form of the assessment complement and reinforce the content and ideology of experiential education? Student participants will catch onto this very quickly and will learn not a little from it.

Practical suggestions

Institutional commitment to experiential learning. Volunteer time and bake sales are useful sometimes but much less useful than a secure budget and "purchased" time. Think about your resource needs, detail them cogently and be up front about these needs. The literature on experiential learning is growing rapidly. Quote from it in your budget documents. Many successful experiential learning programs are described in this handbook Write away for more information and include some in your budget documents. If you've organized a successful pilot program, trumpet its successes. Use allies—students who have participated or want to participate in your program can make fine allies, as can their parents. A final suggestion—don't be snowed. Lip service often is paid to the importance of outside-the-classroom learning. One resource you want is worth more than 10,000 kind words from your principal.

Your relationship with the community agencies and/or individuals hosting students in your program. Most community agencies are flattered by an initial request to host students. The trick is to keep that relationship healthy and we have developed various ways to try to do this. Community supervisors of our students receive frequent invitations to attend cultural events of our institution. Some are "awarded" honorary institutional titles. All are invited to two evaluation/thank you wine-and-cheese get-togethers each year. All are asked to help select the students with whom they will work and to assess the performance of these students. In addition, and perhaps most importantly, we see to it that the work students undertake in their agencies not only is a learning experience for the students but also is of benefit to the agencies.

Assessment of experiential education as an extension of the ideology of experiential education. Student participants in your program should be significantly involved in evaluating their own experiences It is not difficult to develop mechanisms and forms for this purpose.

All of our experiential learning opportunities are graded on a pass/no credit basis. (If a student successfully completes a semester, he/she receives four credits and a pass grade. If a student is unsuccessful, no notation is made on his/her transcript.) I suggest that you try not to jam the assessment of experiential learning into the traditional A's and F's

Of course, there is more to say about pitfalls and sidesteps For example, you will have to make certain that the trains run on time all of the time. student participants must not miss work sessions or teacher conferences, teachers must meet periodically with host agency personnel, interventions

to save deteriorating situations must occur promptly, etc. For example, you will have to figure out how best to integrate the students' experiential learning experience back into their academic work. For us, this involves, among other things, (1) trying to match particular students with particular experiential learning opportunities and (2) a decision to make the experiential learning opportunity one-fourth of the intern's academic load, an eight hour per week work obligation instead of a forty hour a week obligation.

Reflections

The point with which I close is an extension of earlier statements that students can serve as allies in gaining resource support for your program and that students should be involved heavily in the assessment of their experiential learning experiences. I encourage you to involve students in all levels of your program. We do in Binghamton and it works. Students sit on our program's committee, seek out additional internships, lobby for resources and help with the nuts and bolts administration of the entire operation. Your program itself can be . . . an experiential learning opportunity!

Sister Duncan's Assessment

by

Sister Virginia Clare Duncan, Assistant Dean
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Perspective

Experiential learning has, in my opinion, only recently gained "respectability" among most educators. For my part, had anyone suggested to me a decade or so ago that learning could be acquired outside the carefully structured environment that was my classroom, or by some methods other than the intellectually stimulating experiences which I provided in my classes, the idea probably would not have been given a second thought. Too many "innovations" were already threatening to effect havoc in my secure world of the self-contained classroom. Oh! I readily admitted that "the whole world was a classroom," but, well, not really . . !

Several years of working with both "younger" and "older" adults at the college level have altered my views about when and where valuable and "respectable" learning occurs. I am becoming more and more suspicious that much of what goes on in the realms of academia is often only accidentally related to future adult roles in the "real" world; also, I suspect that much of what we do teach might be learned more easily and more effectively in certain "real" world environments. I am well aware that positing such ideas may make me *persona non grata* with many of my colleagues, but that is a risk I must take. Perhaps I can redeem myself somewhat by hastily adding that I have absolutely no empirical base for the suggestions I have made. They have their origins only in years of personal experience teaching pre-schoolers to graduate students.

In my opinion, participants in experiential learning programs can derive many benefits not as readily or as fully available to them in formal classroom situations. Here I will mention only three which come to mind.

- ***Enrichment of personal and social life.*** Activities carried on outside the confines of a classroom or away from the more secure environment of the school often make demands on students which they might not otherwise experience until much later in life. Punching time clocks, taking orders from "the

boss," interacting with many diverse personalities, maintaining production standards—such activities seem to provide a better opportunity for acquiring unique skills, attitudes and values necessary for effective functioning in adult roles.

- ***Career advancement.*** All of us are acquainted with at least one person who has risen from dishwasher, gas pumper, or messenger to a high level management position. The surest way to the top is through hard work and experiential "know how," and the kids who begin that process in junior or senior high school may have an edge on those who do not.

- ***Educational advancement.*** Educational advancement is a possible benefit of experiential learning which might easily be overlooked. In the last few years however, personnel in many colleges and universities have begun to recognize the value of experiential learning outcomes, and are seeking ways to evaluate and credentialize those competencies. I, personally, have worked with over 300 "older" adults in a program which assists them in identifying, articulating, and evaluating their life/work experience outcomes. If the evaluation is favorable, applicants may be awarded academic credit for the competencies achieved; credit which may be applied toward the earning of a degree.

Assessing outcomes achieved is the most difficult task of any experiential learning program. How do we determine whether or not students *really* know what they *say* they know, or can *do* what they say they can do? In such nontraditional learning situations, traditional assessment methods just don't work. And therein lies the problem.

Problems

We seem to encounter a number of pitfalls when we attempt such assessment. Often we either assess inadequately or not at all, use inappropriate methods, or apply much more severe standards than those used in assessing more traditional learning. In an attempt to remedy such weaknesses, I would suggest that any experiential learning program provide the following:

- ***A statement of philosophy of experiential learning.*** A statement of philosophy of experiential learning should address itself to the nature, purpose, value, and anticipated outcomes of the process. School personnel as well as persons at work sites should be in basic agreement regarding this philosophy; otherwise, students will be caught in the crossfire of opposing or incompatible views held by persons responsible for the program.

- ***Assessment design.*** This is perhaps the most difficult task to accomplish, but it is likewise the most crucial. The ultimate success of any experiential learning program will depend largely on the extent to which all those involved can indeed demonstrate professional accountability for quality and effectiveness. Accountability requires assessment and assessment requires a design, or a plan. Such an assessment design has four essential components.

  — ***Outcomes.*** Here you will want to list the anticipated outcomes of each experience (office assist, teacher's aide, restaurant employee, etc.). Outcomes should include the specific skills, concepts, attitudes, values, or knowledge which a student would be expected to achieve as a result of a particular experience. Stated outcomes provide the content and the rationale for assessment.

  — ***Assessment tasks.*** Assessment tasks identify the way in which a student will demonstrate the mastery of an identified outcome. These may include performance tests, written tests, simulations, interviews, portfolios, projects, case studies, etc. In designing a task you must keep in mind that it must be appropriate for the type of outcome being assessed and that it provide ample opportunity for students to demonstrate mastery of outcomes.

  — ***Criteria.*** Criterion statements communicate to students essential characteristics of the assessment task. They include such qualifiers as consistency, clarity, organization, communication effectiveness, accuracy of information, etc. Usually a certain number of points is assigned to each criterion, with the one which is most crucial to the task being given the greatest weight.

  — ***Standards.*** Standards define to what degree or how many times a student must demonstrate mastery in order to be considered competent, e.g., achieve a total score of 70 percent on a task, thread a 16 mm projector three times without error, give an oral presentation that is satisfactory to a panel of three judges, etc. When dealing with outcomes in the affective domain, criteria and standards tend to get a bit fuzzy. Here you may have to be satisfied with more general characteristics, and simply accept certain types of behavior as *indicative* of achievement.

- ***Quality control.*** If your experiential learning program is going to be worth the paper on which it is written, you will need to make provisions for strong quality control. Quality control is, in the final analysis, dependent upon quality assessment. If you have an assessment system that is reliable and functional, if you assess outcomes consistently and thoroughly, quality control of your experiential learning program should be assured.

Practical suggestions

As I reflect upon what I have learned during the past three years, it occurs to me that the general principles and procedures of assessing experiential learning in junior and senior high school and at the college level are not too foreign to each other. So, I offer a few suggestions.

1. Draw up an assessment design to match the problem areas previously given, or in accordance with other similar guidelines. This, in my opinion, is your most important responsibility.

2. Develop instruments for assessing learning outcomes for each area of experiential learning in which you place students: health services, business, social work activities, classroom simulations, etc. Some types of instruments which you may wish to design are mentioned in the problems section. Your intent should be to develop instruments appropriate for assessing the diverse learning outcomes which students might achieve in all areas of experiential learning which you coordinate. You will also want to develop instruments for student self-assessment in many areas.

3. Communicate all assessment requirements to students *prior* to their engagement in the learning process. Often, even in traditional learning situations, students perform poorly on tests or other evaluative tasks because they receive no prior information concerning the content of the assessment, or even the time of assessment. The purpose of assessment is to determine what students have learned, not to create a guessing game between assessors and assessees.

4. Select assessors with care and provide adequate and appropriate training for all. In selecting assessors you will want to draw not only from among persons directly responsible for the learning process itself but also from "experts" in the field. These will be practitioners and professionals highly experienced in their area of expertise. It is my opinion that the persons who provide instruction or training should not be the only ones who assess the outcomes of the process. In most assessment situations it is good to have more than one judgment of student achievement if at all possible. I realize, however, that it may simply not be practical to have multiple assessments.

5. Provide frequent and adequate feedback to students on assessment results. Feedback should include a discussion of strengths revealed as well as an analysis of apparent weaknesses. Too often feedback to students on assessment results emphasizes the negative—what the student does *not* know—and it is this that becomes fixed in students' minds. The possible causes of poor performances should be analyzed and students given the opportunity to repeat learning experiences or engage in new ones designed to achieve the outcomes not yet mastered.

6. Provide opportunities for students to reflect on what they have achieved in experiential learning situations and to evaluate that learning in the light of their present interests and future life goals. Such reflection and evaluation may occur in special seminar-type situations, during feedback sessions, or in any number of ways. I believe that it is only through such reflections that learning is internalized and made meaningful. Reducing the traditional dichotomy between theory and practice should still be a major concern. Just as theory, divested of practice, is usually barren, so practice without any regard for theory is hollow and often meaningless.

You will have to find your own techniques for engaging students in such reflective and evaluative processes. No one set of techniques is appropriate for all situations. The technique that will lead a student to ask, "Why is this important?" "How has this experience changed me?" "How will this experience affect my life in general?" is the right technique to use.

Reflections

Is experiential learning the thing of the future in secondary and postsecondary educational institutions? Can students of the 1980s expect to receive at least a portion of their education at off-campus sites and in more nontraditional ways? By 1985, will most institutions of higher education have formal programs for evaluating and credentializing life/work experience competencies? It is my hope that educators will soon begin to give more credence to the nature and the quality of learning and less to the methods by which learning is achieved, that instructors will see their role more as diagnosticians and assessors of learning, and less as dispensers of information.

There is the strong possibility that we could overemphasize the experiential approach to the detriment or neglect of other equally valuable approaches to learning. In my opinion, there is and always will be a need for more structured classroom learning experiences, for the stimulating and informative lecture, for the social and intellectual give-and-take of a group discussion. It seems to me that many of our educational problems have been rooted in our

monolithic approach to learning. My philosophy has always been: "If a method works (is the most effective way to achieve the outcomes addressed) use it." Experiential learning, if pursued properly, is a highly effective method of learning, but it is not and cannot become the only method. We are still novices in the art of designing, directing, and assessing experiential learning programs.

Harnessing the Spirit!

by

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Perspective

It is not easy to wrestle with a spirit! Yet wrestle you must if you use experiential learning to build bridges to the world of work.

Some say that traditional education (and traditional work!) is so cut up, measured, defined, codified, routinized, objectified, timed, and packaged that the mystery and 'elan of learning have been completely exorcised. Assessment is easy—the questions have already been answered. To engage in this kind of learning is safe. It is secure. By dutifully applying formulas, normative curves, and letter symbols, the teacher is efficiently spared most wrestling and struggle. The "spirit" is gone.

Problems

In assessing experiential learning, however, there is "spirit" aplenty to challenge even the most experienced teachers. This overall "spirit" is nebulous, elusive, and attitudinal generating vibrant ghosts such as "experience," "quality," and "value"—learning dimensions which have yet to be pinned and defined. This "spirit" must be struggled with repeatedly in individual learning situations. Since experiential learning often takes place simultaneously in two areas, academy and marketplace, the wrestling becomes even more difficult. While problems are numerous, the assessment of this kind of learning forces wrestling with three persistent spirits: "experience," "quality," and "value."

"Experience" may be the best teacher, but who can adequately harness this spirit? For educators, such an attempt means a careful continual distinction between an experience in itself and the learning which the experience engenders. "Experiential education" or "credit for experience" are colossal misnomers unless one understands that "learning" is the central objective of any assessment. While I have no right to judge an experience with its complete personal meaning for the student, I can and do help that same student identify and articulate the learning involved. Thus, assessing "experience" rather than subject matter means wrestling.

"Quality" is that elusive goal of all learning from Zen to motorcycle maintenance! Again, it is also a free spirit, though many have deluded themselves into thinking they have captured, delimited, or even marketed it. From age to age, group to group, and region to region, educators wrestle with this evasive spirit. In experiential learning, the burden of proof for "quality" usually falls upon whoever seeks change, and these must somehow document and measure "quality" to assure that existing standards (whether they be "quality" or not!) are met. The assessment of "quality" means wrestling.

The "value" problem also challenges the aware educator. What values lie beneath the evaluation? The student's personal development? The "purity" of the academic discipline? The institution's growth? The work or production factor? A grade of A or B can have many meanings, depending upon the grader, gradee, and circumstances. Experiential education, with its roots in both the worlds of education and work and with its emphasis on individualization, forces the bigger evaluation issues which, in turn, demand wrestling.

Practical suggestions

The wrestling begins in earnest when the "spirits" quicken the practical, when concepts become programs, and theories become practices. By way of practical advice, I have two suggestions. The first suggestion is obvious: be ready to wrestle. If you are not willing to engage the spirit of learning, if you are not set for challenges and confrontation, if you are not prepared for new patterns of assessment, then forget experiential education.

The second suggestion is: use learning contracts. If there is any one practical thing that facilitates the assessment, it is the learning contract. Contracts serve as "currency" or "invoices." They can be a medium for information exchange, clarifying the many variables and details involved in the learning. In brief, learning contracts are "negotiated learning agreements." They are usually written cooperatively—student, teacher, field supervisor together. They specify in advance (or in retrospect, with adult prior learning contracts) the goals and objectives, the methodology, the resources, and the evaluation of the learning experience. Simplified, a contract looks like this:

Goals and Objectives	Methodology	Resources	Evaluation/Grading
(What do you want to learn?)	(What will you do to learn?)	(What persons, places,things will you use to learn?)	(What evidence of learning will you present?)

With a contract, the wrestling is focused. Because contracts demand both planning and quality control, the assessment process blends with the planning process. A contract communicates well by cutting through vague generalities.

by demythologizing objectives, by focusing on specifics. With a contract, there is no philosophizing about abstractions such as "learning experience," "quality," or "value." With contracts, these "spirits" take on flesh, become specific, and can be encountered, engaged, harnessed, and used to advantage. The problems do not disappear, but regular use of contracts can reduce the "haunting" effects of prejudged opinions of "quality," pre-set "value" judgments, and pre-determined definitions of "learning." Contracts can speak a common language for all education's various audiences—students, teachers, administrators, business/labor/professional/governmental workers, parents, and community groups.

Reflections

In bridging the education-work gap, a learning contract worked up and signed by the three parties involved—student, teacher, and work supervisor—can be a major ingredient in increasing understanding between the world of learning and the world of production. This kind of education can bring these worlds closer together . . . as long as there's a willingness to wrestle with "spirits."

Omar's Dilemma

by

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Perspective

All sorts of virtues have been ascribed to experiential education as an instructional approach. I've heard dozens—among them: it relates theory to practice, it tests ideas in the "real world," it is career preparatory, it sharpens skills through "hands on" activity, it focuses student interest in academic and vocational pursuits, it contributes to self-awareness and self-confidence, and possibly, it provides some pocket money. I have little doubt that experience can at least help accomplish these objectives.

From my liberal arts background, I am more concerned with another aspect, more difficult to describe, which we might call intellectual growth or personal growth or understanding. Ken Kesey's novel, *Once a Great Notion*, an autobiographical account of his frustrations in moving back into his family's logging operation in Oregon after a long absence, makes a statement which has meaning for me in thinking about the type of learning I want to emphasize. In a small anecdote, Kesey wrote:

> To know a thing you have to trust what you know, and as far as you know in whatever direction your knowing drags you. I once had a pet pine squirrel named Omar who lived in the cotton secret and springy dark of our old green davenport; Omar knew that davenport; he knew from the inside what I only sat on from the Out, and trusted his knowledge to keep him from being squashed by my ignorance. He survived until a red plaid blanket—spread to camouflage the worn-out Outside—confused him so he lost his faith in his familiarity with the In. Instead of trying to incorporate a plaid exterior into the scheme of his world he moved to the rainspout at the back of the house and was drowned in the first fall shower, probably still blaming that blanket: damn this world that just won't hold still for us!

In the most general goals of our educational programs we are trying to help students understand, in a way beyond Omar the ground squirrel's comprehension, the interrelatedness of the "inside" and the "outside" of situations—the relationships between what happens to us personally and all sorts of other events over which we have little control. Only with such awareness can we make sound choices and be truly effective participants in the larger society.

When "service" to community is part of the experiential activity, the aim should also be to help the student formulate personal perspectives on the relationships between "work" (meaning the way one earns a living) and "contribution" (meaning what one does that is of more than immediate importance). Experiences should do more than show the student how to do a specific job. They should provide a forum for analyzing the way that job will fit into students' lives and balance with other activities—the use of leisure time, service to others, family responsibilities and personal growth. The nature and personal significance of the job must be reflected upon.

Problems

Building a program with these goals and knowing what has happened to students in the process is easy to argue for but difficult to do. The obvious danger is that circumstances often pull student and teacher toward the simplest solution—designing an activity which addresses the need for job training or work experience but with little or no opportunity for broader understanding. The forces of the work place pull in this direction—the need to "get the job done" often has to take precedence over quiet conversation. And the teacher may be overloaded simply by finding a placement for the student and decide that only skill acquisition can be measured.

Practical suggestions

The key to a sound experience-based learning program comes at the beginning and during the program, not in devising assessment techniques for the end of the process. The selection of substantial learning environments, the matching of students' learning needs with the work assignment, the formulation of clear learning goals or objectives, and constant interaction between teacher and student during the work assignment are absolutely critical to success. If these steps are successful, standard processes used by professional educators to determine what has been learned may well complete the job of assessment. These often include analysis and discussion and written work, class presentations, reflections on readings, or even reflective essays.

A work or community service experience may be a student's first exposure to substantial independent learning. Consequently, careful attention has to be devoted to helping the student determine what he or she wants to learn from the experience. The rare question "What do you

want to learn?" should begin this process. The answer will probably be halting and vague at first, as the student tries to articulate very personal ("non-academic") goals. "I just want to see what it's like." But with coaxing and dialogue, these first efforts can be turned into genuine learning goals and related to a broad learning plan. Careful advice about what questions to ask of the employer, preparation for an initial interview, and the formulation of complementary learnings (such as readings or field trips) should follow.

Ideally these objectives should be in writing, prepared initially by the student. With constructive reactions from the supervising teacher and careful rewriting, a contract or learning agreement will result. I have found it constructive, however, to permit the student to modify the agreement with the consent of the teacher during the experience.

During the experience, in addition to regular discussions about the work experience (which may be conducted individually or in a group), a written journal or "diary" is often useful. With a strict agreement of confidentiality between student and teacher, the process of distilling reflections and observations into writing and then discussing them often leads to insights which don't emerge from casual or unstructured conversation. For advanced students, readings might be assigned to parallel the work experience and these too commented upon in the journal or diary.

The ongoing dialogue between student and teacher is the primary means of preventing the student's complete absorption by the work environment, or "going native." The teacher should explore the negative as well as the positive aspects of the student's experience, and in fact should even draw learning from bad experiences. For career purposes the relation of the work to other personal goals (and the process of setting goals) should be a central part of the discussion.

What I haven't addressed, of course, is a precise means of analyzing the changes which take place in the student. Some say that pre- and post-tests to measure attitudinal changes, vocational choice, or other personality characteristics can be useful, although these are sometimes problematical because of administrative red tape or because of the limited time commitment in many experiences. I hope that some of the current work in the area of moral development (especially that of Lawrence Kohlberg at the Center for Moral Education at Harvard University) might eventually lead to more sophisticated mechanisms for measuring developmental changes. But it's hard to assess these prospects because of controversies swirling around Kohlberg's work itself and because of the unpredictable pace of the research

Another prospect has been suggested by Richard Graham. Graham hopes that through an evaluation of the developmental stages of the student at the time of entrance into a work experience, the student will be matched carefully with an environment which would help him/her move to a higher stage of development. In other words, if we can determine the student's stage, the placement might be structured to achieve movement from one stage of development to another. The fact that this is difficult with regular classroom instruction leads me to be pessimistic, but the outcome is nonetheless desirable.

Reflections

Most of the outcomes of experiential education I consider important can only be evaluated over the long run. "Satisfaction" and "contribution" and "constructive use of leisure time" clearly can't be measured immediately after an experience. As a result, I continue to argue for educational outcomes which cannot be measured to the satisfaction of social science researchers or political decision-makers. But the fact that something cannot be measured doesn't mean that it's not valuable. So we should try to create a quality process before we create a measurable process, and to instill in faculty and students the understanding that learning is something that occurs in many different ways and at many times. It's a process which encourages people to look at many aspects of their lives as the opportunity for learning and personal growth, and a process which emphasizes building intellectual relationships between divergent kinds of activities. It's my conviction that only in this way, as Omar the ground squirrel discovered, can individuals learn to work effectively in a rapidly changing and highly technical society, where the value of the individual's work and the opportunity to make a contribution are constantly being challenged and diminished.

What's the Difference?

by

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National Student Educational Fund
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and

David Rosen, Principal Investigator
NSEF Project on Education and Work

Perspective

We offer these observations from a perspective of six years of experience in analyzing the effect of programs in postsecondary education on the lives of students and prospective students. We have focused on student financial aid programs, information programs, admissions policies and opportunities for completion. In matters of work and education, our experience has included analysis of community service opportunities at the high school and postsecondary level, the quality of work experience in the College Work Study Program, and during 1976, the identification of exemplary education and work programs at the postsecondary level under a contract from the National Advisory Council for Career Education (NACCE).

The NACCE contract, involving site visits, analyzing characteristics of programs, and writing profiles of sixteen programs, provided an opportunity to look at work and education programs arising from several traditions, including liberal arts, cooperative education, professional education, experiential education, comprehensive counseling and community college education, and competence-based education. What made the diverse programs which we selected "exemplary" was their focus on what actually happened to students in terms of changes in skills and attitudes. They were widely recognized as exemplary because of their primary purposes (regardless of the specific activities) in meeting the needs of students, rather than those of industry, teachers or administrators, and which led to positive changes in skills and attitudes of students.

It is this focus on positive changes for students which we feel must underlie any effective educational strategy seeking to clarify student perceptions of education, work, and their place in the world.

Problems

Two primary problem areas will arise *for teachers* attempting to relate education and work experiences for students. The *first* area centers on the importance of clarifying the *values* a student holds regarding self-image, relations with other people, perceptions of diverse groups (families, classrooms, neighborhoods, schools, cultural groups), and activities (work, recreation, school, religious observance). It may be a problem for teachers accustomed to working with subject matter (information) to focus on learning activities whose aim is to make students aware of their own values and experiences. This problem involves the moving away from learning based on information which is important in a classroom setting toward learning based on the motivations, attitudes and skills of students which are developed both in and out of the classroom context. It may be a problem for teachers to focus on assisting students to become aware of their o'.n values and the values of others, to recognize the importance of values and attitudes in working and living in and out of the classroom, to test their own values and attitudes, to compare their values and attitudes with those of others, and to articulate orally and on paper how it feels to act out and be responsible for their values.

The *second* problem area teachers are likely to face is the practical one of how to actually provide meaningful *experiences* for students to test out their values and attitudes. This problem area challenges a teacher to change the traditional meaning of "a test" from that of measuring the possession of information or a skill into that of having a students *test themselves* on what it is they want to learn, and what they actually did learn.

We view the difficulty in providing appropriate opportunities for experience as arising from the way most classroom based learning is organized. As described in Figure 1, the General Learning Model often breaks down at the elementary and secondary level as well as at the postsecondary education level, by not affording students the opportunity to test by direct experience the importance of the information discussed in class. Such learning does not allow students to test their own values by comparing their classroom information to their experience outside the classroom.

The testing of these new conceptual structures is the final phase. It is a phase at which the cycle is often broken in formal, university-level education because today there are few pedagogic mechanisms available to students by which they can test the implications of their new understandings The richness of the learning process is broken, too, as new conceptual bases are learned and then stored away to gather dust Stage 4 is clearly more often reached in courses run along experiential lines, in short "executive" programs—or in courses allowing access to a pseudo real-world environment, via simulation models, for example—(See Figure 2)

Figure 1

A General Learning Model
(Rockart and Morton, 1975)

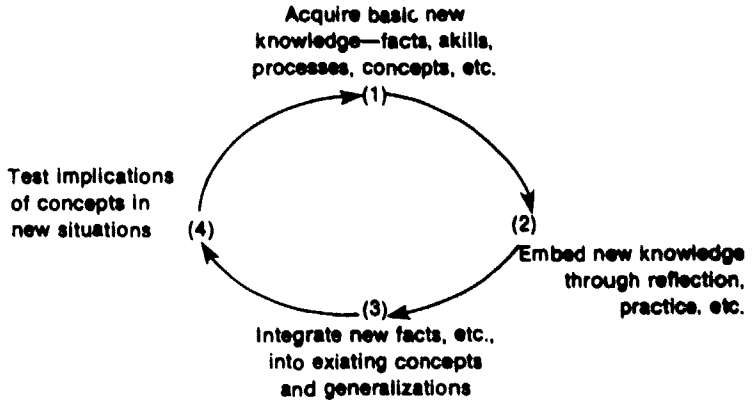
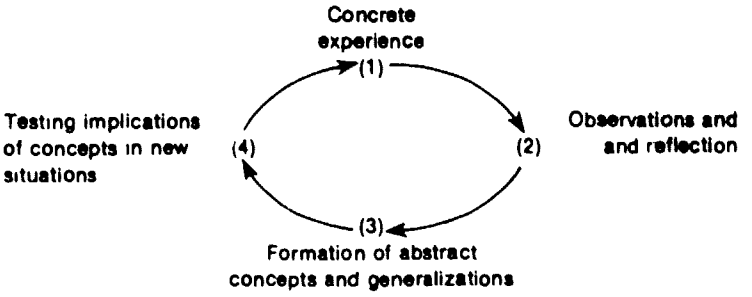


Figure 2

The Experiential Learning Model
(Rockart and Morton, 1975)

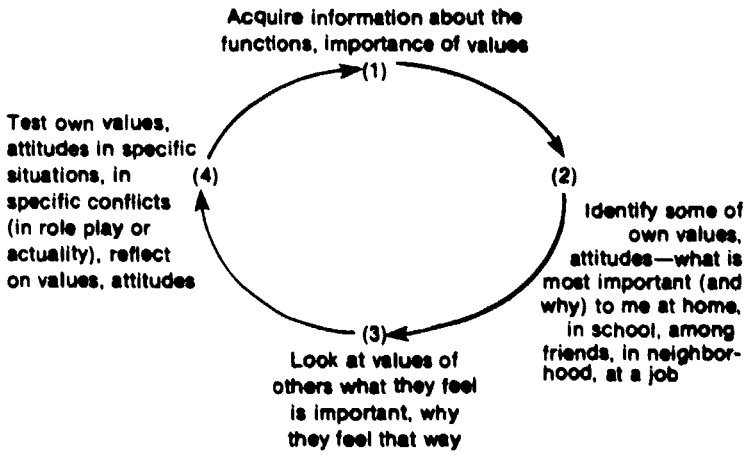


A Value Learning Model (Figure 3) may be helpful for teachers having students test the importance of their values. This model is based on having students learn about their values through classroom and non-classroom experiences.

In addressing the problems of clarifying values through a learning process and testing them through an experiential process, teachers at different grade levels will be faced with decisions about the level of detail they will use in materials. Older students will be able to look in more detail at their own attitudes, skills, and information presented about the attitudes and skills of others and about the outside world's demands

Figure 3

The Value Learning Model
(Rockart and Morton, 1975)



The primary problem shared by coordinators and teachers in experiential education and work programs is how to most clearly understand and communicate the outcomes of these programs for students. That is, the success of the program can only be clearly communicated to parents, to administrators, to school board members, and to other members of the outside community if it is felt or understood *by the student* that a change has occurred. The crucial question becomes: Can the student articulate the change orally, on paper or in other ways? Has the student become engaged enough in the process of his or her own changes that he or she is conscious in describing them?

In many ways, this problem area should be helpful to coordinators and teachers by pushing them to simplify the program to the point that it assures the ability to assess (in a clearly understandable way) what happened to students in the program.

Thus, the perceptions of the teacher about what happened may be important, but are clearly secondary. They are secondary because they are at a level of generalization which is most important only in verifying what students have reported about themselves. And, since teacher perceptions may vary so widely, their perceptions are not valuable outside one classroom or outside a situation where a coordinator or other person can interpret what happened to the students. Clearly, without direct student perceptions very little useful assessment can be done about values or attitudes.

Practical suggestions

We offer the following broad statement of positive outcomes for students participating in experiential education and work programs: ***Students should articulate insights about the kinds of qualities, personalities, and skills used in various work activities.***

Toward this end, we feel a clarification of values for students, both their own and those of others, is essential for an effective program. We also feel that students must have opportunities to test the validity of their values ("How does it *feel* to be this way or that way?"). They should have opportunities to experience the values of others (through role playing and other activities), and to compare them to their own. In providing such experiences, teachers should give their students clear statements of expected outcomes—changes in skills, attitudes, information—which are understandable by students. Such statements of expected growth in skills and attitudes will prove valuable in integrating experiential and value centered learning, together with learning which occurs in a general learning cycle.

Our primary suggestion for coordinators and teachers working in experiential education and work programs is to center activities on tapping students' natural curiosity to learn about themselves, rather than about a subject matter. Students are interested in exploring their questions about work, a career, or other ideas in relation to their tentative notions about what they want to do, can do, in relation to their abilities, information a[illegible] personality. Students are naturally curious to learn wh[illegible] their best qualities are (analyzing, communicating, administering, deciding, counseling and other personal characteristics), how they can improve these qualities, and what they mean in relation to the world of work. Thus, the best experiential education and work materials and activities will often test "what you know about yourself," rather than the traditional teaching approach of testing "what you know about the subject matter."

It is imperative to record initial statements of students of their goals and interests for a course, and to compare these statements with the students' comments on what they learned at the end of the course. We further suggest that any course activity begin with opportunities for students to put down on paper and to speak with teachers or counselors about their own aspirations, qualities and what they want to get out of the course or work experience activity. Activities should then confront students with information about what they have said they wanted to know, or with an opportunity to choose an environment in which they can test their interests. The emphasis should be on allowing students to become conscious about their initial interests, goals and additional information, for example, in the format of a personal notebook. Students should take responsibility for putting such infor nation

together and seeing it build. At the end of the period, students should be able to evaluate on paper and orally what they learned: "What I now know more about myself: skills, attitudes, personality," "What I was most disappointed with in the experience," "What I hope to try in the future, next semester, next year," and "What I suggest as better ways to run the course."

The materials used to elicit the initial desires of students and to evaluate their experiences in relation to those desires will be valuable for use in discussions with teachers, parents, administrators, the school board and others to get suggestions on how to improve the program. Many ideas should result from these discussions. They should try to consider the amount of time and resources available for placement, supervision, formal testing, special course workbooks, visual aids, trips and other program activities.

Reflections

The overall tone for experiential education and work programs is not much different from any well taught course. Everyone is good at some things. Students should be challenged to find out "What are you best at?" Teachers should also keep an ear out for "What do students from this school actually do after high school?" in terms of jobs, further schooling, marriage, the military. "What do students do who come out of other school programs?" "Why are there differences?"

Two-Bladed Shears

by

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Perspective

I am Barry Heermann, Project Director for Experience-Based Education at Sinclair Community College in Dayton, Ohio. Sinclair is a 13,000 student, urban college which prides itself on its technical/occupational programs. Three out of every four students attend Sinclair to develop particular job related competence. My professional commitment is to learning experientially at secondary and postsecondary levels, and my position at Sinclair and authoring *Cooperative Education in Community College* has allowed direct linkage to this pursuit.

The essence of learning from experience is expressed by Harold Taylor (1976),

> If you want to ride a horse, dance a jig, climb a mountain, build a boat, write a novel, study history, think intelligently, become educated, a certain amount of instruction in a class in the subject will be useful . . . After that you will need to get a horse, start dancing, climbing, building, writing, thinking, and educating on your own. Otherwise, you will not have learned what you need to know, that is, how in fact to do the thing you have set out to learn to do. To learn to do something it is necessary to practice it. (From the Foreword to the Jossey-Bass book by Peter Myer, *Awarding College Credit for Non-College Learning*).

Arthur Morgan (1950) succinctly makes the point.

> Practice and theoretical study should be like the blades of a pair of shears; neither blade is good for anything by itself, but they cut by being in contact with each other Conventional education has been like shears with only one blade—that of theoretical education.

Before considering the problems of assessing experiential learning, I would like to "nit-pick" about nomenclature. Experiential learning, some would suggest, is redundant; all

learning is experiential. But for me there is a clear difference between "book learning" about an experience versus the experience of learning about the experience itself. The difference between experiential learning and nonexperiential learning is the difference between more and less theoretical learning, more and less passive learning, and more and less abstract learning.

Also, I am put off by those who equate experiential learning with nonclassroom learning. Much experiential learning is not limited by location. The challenge to traditional educators is to approach the reality of the experience to be learned in classroom settings. Vocational/technical education can properly pride itself on considerable forward motion in this regard.

Problems

The notion that important learning may result from experience can hardly be refuted. What is refuted is the "who," "what," "where," "when," and "how" of assessment. Specifically: Who should perform the assessment—the employer? the student? the faculty-coordinator? What is to be assessed? Where should the assessment take place—at the training station? at school? When should the assessment take place—midterm? end of term? continuously? And how should the assessment be conducted?

The assessment of traditional learning experiences is tidy, neat, and clean. A lesson plan, a course syllabus, learning objectives or sequences of competencies organizes the learning and defines the content of the assessment. Conversely, a lesson plan or syllabus cannot so readily order the learning experiences of students in training sites. The highly touted "training plan" was, in theory, supposed to do this. But my experience suggests that the theory is not easily translated into action. Students are the first to point out that much unanticipated learning results from cooperative assignments. Moreover, numerous uncontrollable variables intervene

Practical suggestions

There are numerous ways to assess nonclassroom experiential learning. I would like to suggest a process which could be easily transportable to secondary or postsecondary settings. To facilitate the discussion, I would like to focus on who, what, where, when, and how.

WHO? The student, faculty-coordinator, and the employer should be participants in the assessment process While the final assessment is the charge of the faculty coordinator, the student's self-assessment (a powerful learning experience in itself) and the employer's evaluation are strategic.

WHAT? The kinds of learning to be assessed are as varied as the programs from which they eminate. Learning from experiential or nonexperiential settings can be conveniently classified into three categories· information skills (data storage and retrieval). psychomotor skills (physical manipu-

lation), and interpersonal skills (human interaction). As interpersonal skills are so crucial to job success, and as it is so difficult to provide for interpersonal development under nonexperiential circumstances, it is my strong feeling that this area deserves particular attention.

WHERE? The location of assessment should not be exclusive. On-site visitations, school conferences and seminars, employer evaluation at work, and end-of-term meetings at the school suggest settings and opportunities for assessment.

WHEN? Assessment should be continuous. As the employer cannot regularly devote time for this purpose and the faculty coordinator can be present only during periodic visitations, on-going assessment should be encouraged on the part of the student. A log or diary in which the student records expected and unexpected learning related to his/her goals or competency areas will facilitate this process. The action/reflection progression should be a daily or weekly activity of students.

HOW? This is at the crux of it all. I would like to advocate a mechanism involving two phases. The first focuses on expected or intended learning; the second identifies unexpected learning. The first phase takes place at the beginning of the term and includes the writing of work/learning outcomes by the student in consultation with the faculty coordinator and the employer. The employer sees the work and learning outcomes as a mini-job description or MBO s (management by objectives). The faculty coordinator uses this time to suggest application/ development of particular competencies. The student establishes unique learning goals distinct to his/her developmental needs. Typically four or five measurable work/ learning outcomes are written. At the end of the term the student does a self-assessment in addition to the on-going assessment in diary form, and the employer also evaluates the achievement of the work and learning outcomes. The unique dynamics between the participants results in the development and assessment of the work and learning outcomes.

The second component of the assessment involves the student's interpretation in a short theme of the unexpected learning that resulted from the experience. This "reflection paper" is submitted along with the work and learning outcomes form to the faculty coordinator at the end of the term The faculty coordinator considers the reflection paper, the work and learning outcomes assessment, the diary, and the feedback from the student and employer during visitations, in making a final assessment.

Reflections

It is on a personal level that I am most intensely an advocate for learning from experience. Over a period of years, it has become clear to me that my most significant

learning resulted from grappling with important issues and responsibilities related to my work. Traditional educational media, e.g., books and journal articles, took on new and important meaning for me only as it connected with my work experience. Learning to take responsibility for my own learning followed work-related pursuits. That experience is a powerful vehicle for learning is obvious enough to me—whether it involves my six-year-old daughter, a sixteen-year-old vocational student, or a sixty-year-old corporate president.

A Word from Competency Based Assessment

by

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Perspective

I approach this subject from my involvement on the faculty of a small liberal arts college which has had a more than ten year commitment to experiential learning as an integral part of the curriculum, both in the general education program and in the various areas of specialization in which students prepare for careers. The college has been moving toward implementation of a competency based curriculum, both in the general education and in all the academic departments that offer majors. Our commitment to experiential learning not only predates our decision to develop a competency based program, but our experiential learning programs were something of a catalyst in initiating the spirit of innovation, inventiveness and adventure that led to curricular reform. At the same time, while experiential learning has informed our curricular design, our understanding and evaluation of experiential learning has also been affected by the concept of competency based education

The best contribution I can make to this handbook is to offer some suggestions about experiential education and its assessment from the standpoint of competency based education. I will argue that most of those insights are transferable to any experience or curricular structure. Furthermore, since competency based education in the liberal arts, expecially the humanities, is somewhat rarer than the application of that concept to more skill-oriented areas, and since the relationship of the liberal arts to career education is being called into question these days, perhaps I can usefully address myself to that issue.

I would like to make two distinctions at this point: first, between traditional education and competency based education; and, second, between traditional learning and experiential learning. By competency based education, I mean that learning outcomes expected of all students are identified and made public as are evaluative criteria and proficiency levels required for successful attainment of the competence Sets of experiences are also designed to assist students in attaining the required competencies. Traditional curricula in both secondary and postsecondary

education have emphasized a set of subjects, represented by courses, which the student is required to pass. Competency based education, by contrast, emphasizes a set of skills or abilities to be learned. Some of those required skills will, of course, be in mastery of content areas; however, the focus is on the attainment of the competencies and not upon a prescribed set of subjects. The emphasis is upon the process by which the student becomes competent and stress is placed upon personal, primary participation in learning, e.g., competency based education stresses diversity of learning, whereas the subject matter curriculum has tended to stress uniformity of learning. Since there is no one most effective way to develop knowledge or skill for all people, effective education should provide varied but interrelated units of experience that can lead to desired learning outcomes. Ideally, these experiences should be designed so as to encourage each student to develop at his/her own pace with the support of any resources available. I suggest that experiential education, as a learning component, fits nicely into the goals I have described.

Experiential learning differs in certain ways from traditional classroom learning. Traditional learning begins with receiving information that is usually transmitted through a lecture or book or other symbolic media. The student then tries to assimilate this information and understand some general principles, e.g., to learn what the information "means." The next step is to be able to figure out how the general principle can be applied and to actively apply it. In other words, the student moves from concepts to application and action. Experiential learning is almost the reverse. The student starts with action, sees and understands the action and its effect in a particular situation, then moves toward generalizing some principle under which that particular instance falls, and finally applies that principle appropriately to a different situation.

Neither kind of learning is sufficient by itself, but experiential learning has some distinct advantages Experiential learning is not dependent at the outset on facility with symbolic communication skills as is traditional learning Further, lack of motivation may be the prime obstacle to learning for many students Traditional learning usually depends upon some external motivation, often supplied by the teacher, while experiential learning is more likely to provide its own motivation intrinsic to the experience. However, there is far more likelihood that students will learn to apply and act upon their learning in experiential education, largely because of the circumstances in which they learn, and experiential learning is less easily forgotten than traditional learning.

Problems

Experiential learning is not universally appreciated. Some people in all sectors—administrators, teachers, students, community leaders, parents—see it as a departure from and a subversion of the goals of education, even though it

appeals to many as an affirmation of the dominant American value of practicality. In coordinating an experiential learning project, problems are likely to arise in some or all of those sectors. For example, experiential education can be expensive—not cost-effective when compared with traditional learning. Given sufficient motivation (ah! there's the rub), traditional learning can reduce the time and effort necessary to learn something new. Experiential learning is usually slower and often requires repeated efforts to master the skill or concept. Administrators and community leaders with an eye on budgets may chafe under that, and teachers, who find that the work load becomes heavier with the individualized attention necessary to this process, can approach "burn-out."

A wide variety of experientially based programs has grown up in this country because it was thought that the student should experience the "real world" in order to get an edge on the job market, to serve a humanizing function, to serve the community, to make money, or to explore a career. But seldom do program objectives relate directly to the central educational goals of the school system. Some people—administrators, unsympathetic teachers, community critics—are quick to point it out if your experiential program seems to be a "sidecar" with no integral relationship to the basic curriculum of your school. And it is difficult to answer those objections if no learning goals have been stated at the outset of the experience. When the objectives of the experience are unclear, it is difficult to judge the quality—but what is it that one judges?

A further problem with the assessment of the nontraditional nature of experiential learning is the subjectivity of the evaluation. All evaluation of student progress involves subjective as well as objective measures, but objective, standardized measurements are usually more acceptable because they are available for public examination and judgment. Subjective measurements are held in suspicion by all concerned, even by students, because they involve arbitrary criteria A potential problem in trying to specify such criteria is the double danger of either being so explicit and narrow that student-initiated learning options are either smothered or missed, or, on the other hand, being so open-ended that quality control becomes haphazard

Finally, the most vexing problem I have faced in evaluating experiential learning (or traditional learning, for that matter) is the difficulty in assessing affective learning Highly cognitive or skill-oriented learning is easier to judge, but the affective learning that takes place, especially in an experiential program, may be the most valuable dimension of all This problem is puzzling for the evaluator, difficult to explain or defend to critics, and may be most frustrating to the student if there is no avenue to express what he/she feels has been of most value in the experience

Practical suggestions

In trying to speak to the problems I have raised, let me begin with the last one. My suggestion is very simple: don't neglect the affective domain. As a paradigm case, let me use the realm of values. Values do get dealt with in one way or another in any learning experience. They may be "bootlegged"—unconsciously dealt with, or they may be handled on a purely cognitive and theoretical level. I would argue that values are best confronted and understood not as abstractions, but as they are expressed in the norms that undergird and determine the character and direction of the institutions of society. At one level, attention to those values, recognition of them, and the ways in which they relate to the student's personal values can provide a significant dimension to an experientially based program. Notice that this is very different from requiring a student to adopt or reflect certain specified values. The goal, rather, would be specification of the ability to identify and consciously employ the skills or processes by which values are formed.

A second suggestion is to specify the desired learning outcomes, the educational goals, of the experiential program or project in advance. Three benefits can result from such a practice First, it becomes possible to see the experience in relation to the curriculum and to tie the experiential program, conceptually, to the goals of the school system, i.e., it is no longer a sidecar, but an alternative learning mode whose goals do not necessarily differ from those of traditional learning. If you start with learning outcomes, it then becomes possible to design experiential programs whose goals reinforce traditional education, so t' t "liberal education" or the humanities are seen as integral to career education rather than extraneous to it.

Second, the student is provided with a "filter" through which to view his/her experiential program If he/she knows beforehand what you expect the experience to produce, the very concentration on those goals maximizes the chances for their realization. Specifically, the student does not enter into, say, an internship as a purely open-ended experience with a merely hopeful, let's-see-what-happens attitude Rather, he/she knows some specific objectives, has done some preparation, has decided on some desired outcomes, and knows how they will be assessed For example, a student undertaking an internship in a local government office is likely to find it a valuable learning experience, even with minimum supervision. But if the student has decided in advance that one of the goals of the experience is to identify and evaluate the dominant values that are expressed by and undergird our form of government, the experience would take on a certain focus, and some preparation would be done to help him/her to accomplish that task

Third, a statement of desired learning outcomes provides you with a starting point for determining criteria for assessing the experience. If you know beforehand what you are going to assess, it becomes possible to decide what standards you will use to assess them, what products—papers, projects, interviews, advisor reports, etc. will provide the information and what levels of proficiency you will expect. That is helpful not only to you but to the student who, in my judgment, deserves to know those things in advance. The tendency of students reporting experiential learning (even adult students, I have discovered) is to talk about what they "did." They have difficulty separating what was "done" from what was "learned." If, therefore, it is learning you wish to assess, the student needs some help in telling you what was learned. I would suggest that as a part of the evaluation process you ask the student to respond to three questions: What did you do? What did you learn? How did it affect you? This makes it clear that learning can be distinct from activity and provides a vehicle for generalization. It further gives the student an outlet for the affective and attitudinal dimensions of experiential learning.

Finally, I suggest that you not be afraid of the subjective side of assessment. It is unavoidable. I propose that criteria which may admittedly be subjective and arbitrary should nevertheless be stated and made public, and that they be submitted to a review process. A learning contract can be drawn up in light of the learning goals and then submitted to an assessment team for review. The quality control is in the review process. The criteria are spelled out, and the team decides the "worth" of each individual situation. This process places the responsibility for arguing the specific merits of the proposed experience with the student and his/her faculty mentor. Some general formal guidelines could be established by the assessment team for all learning contracts, thereby assuring greater uniformity and reliability.

Reflections

I have tried to argue here that experiential learning dovetails with and can be aided by some concepts from competency based education and that the differences between traditional learning and experiential learning parallel to some degree the differences between traditional education and competency based education. Some of the insights which can be used in the assessment of experiential learning in career education are. (1) concentrate on stating learning outcomes, (2) integrate general education with career education, (3) emphasize the usefulness of varied learning styles, (4) attend to affective learning, (5) lend credibility to subjective measures in your assessment, and (6) introduce by means of a review process, a mechanism for quality control of experiential education.

Simulation

by

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Perspective

My own experience with experiential learning has been primarily in health professions education: medicine, dentistry, pharmacy, nursing, and allied health. In all of these fields it has been traditional for a part of the professional curriculum to be devoted to what is called "clinical experience." Typically, such experience consists of assigning students to out-patient clinics or hospital wards where, except for the prohibition against prescribing treatment, they are expected to interact with patients and senior staff in much the same way as does the mature professional. Recently, concern for career mobility has also induced some health professional schools to add various kinds of work/study programs wherein applicants with relevant work experience may be admitted with advanced standing; in others, students may combine work with study, either for credit or simply to gain field experience.

Problems

In implementing and assessing programs of this type, we have encountered many problems. When I first started to work in this field some fifteen years ago, I found that existing tests were simply not suitable either for evaluating program outcomes nor for certifying individual competence. Not only did the paper-and-pencil tests lack relevance and validity, but they were also woefully deficient in terms of the range of competencies they were designed to measure. On the other hand, traditional practical examinations, in which each student is observed examining, diagnosing and recommending treatment for one or more patients, often failed to meet even the most modest standards of interrater or sampling reliability. Generalization about student competence based on limited and unstandardized observations of performance in such circumstances was hazardous indeed. And you can be sure you will encounter analogous hazards whenever you try to use limited, unstandardized slices of reality to assess the outcomes of experiential learning in any field.

At this point, we considered relying on something analogous to "on the job" ratings solicited from students' supervisors or instructors, ratings which presumably could be based on many observations over a long period of time. However, our experience in trying to use such ratings either

to assess individual competence or to evaluate programs was extremely discouraging. Not only did the process of continuous assessment contaminate and jeopardize the learning environment, it actually contributed little usable evaluation data. All too often, we found that all the problems of interrater and sampling reliability, characteristic of practical examinations, were actually exacerbated in the ratings of students obtained from so many untrained observers. I say "untrained" because instructors in clinical settings are typically chosen on the basis of their qualifications to do research or to deliver health care, not on the basis of their ability to make the clinical experience an educational one; thus aspiring professionals sometimes receive less than adequate supervision, guidance or evaluation, and the criteria used to evaluate them are often highly variable. Nor could ratings be used to evaluate programs. The student's actual experience depends upon the accidents of nature and the flow of real problems in the particular work setting in which each was placed, and it was difficult to control, standardize or sequence that experience properly, or to assure that all desired learning could occur. Since the experience was unstandardized and inevitably varied both within and between sites, it was often impossible to obtain generalizable outcome data to assess the effectiveness of particular program designs. Alternatively, cost considerations made it unfeasible to rely on observations of an "educational process" which was being conducted in dozens of different clinical settings, each with only a few students.

Practical suggestions

We turned to a technique which princes, kings and generals have used for centuries in the training and assessment of military personnel—the technique of simulation—whereby great armies, locked in mock battle with banners flying and equipment rolling, can be observed and their performance can be assessed, though fortunately, their "casualties" can usually get up and walk unaided from the field of combat. Similar strategies have been employed from the beginning in teaching and testing personnel for some of the newer and more hazardous occupations, where in real life, practical experience is either too dangerous (as in the case of commercial pilots) or is simply unfeasible (as in the case of astronauts).

My first experience with simulation occurred when I began to work with medical colleagues to construct a set of exercises designed to simulate the data-gathering and decision-making process involved in diagnosing and managing patients From these early efforts, some very sophisticated forms of written simulation—now known as branched problems in patient management— have evolved These exercises are now being increasingly employed not only in the formative evaluation of medical students, residents in training and physicians in practice, but also in certifying their readiness to be let loose on the public and to assume full responsibility for patient care.

The basic approach to the construction of written simulations, as elaborated in *Construction and Use of Written Simulation*, (McQuire et al., 1976) was readily applicable to the construction of games and simulations in other formats: audiovisual, computer assisted and oral interactive. We now use simulations employing all these modalities to teach and test data gathering and decision-making skills. In addition, we have found that simulations based on visual representations—photographs, movies, sound simulators, and three-dimensional models—are exceedingly effective in the instruction and assessment of observational and interpretative skills. Similarly, three-dimensional models and live simulators, programmed to represent various problems are useful for teaching and testing technical skills. Additionally, live simulators, programmed to represent various types of patients, colleagues and interprofessional groups, are exceedingly valuable for enhancing and appraising interpersonal and communications skills. Finally, our experience indicates that the methodology of simulation is widely applicable to the implementation and evaluation of experiential learning in an almost unlimited variety of content areas, educational levels and training and management settings.

The simulations which we prepare are much more tightly structured than are typical games and simulations. They present realistic situations that the health professional will frequently encounter and should be competent to handle. The whole range of possible outcomes that a student could obtain with different patterns of inquiry and intervention in a particular situation can be predicted and scaled according to the level of competence they indicate.

Students immediately perceive and are enchanted by the obvious relevance of these simulations. This perceived relevance can be achieved without being dependent on situational constraints in the range of problems available at a particular place and time. The very fact that learning and assessment tasks can be predetermined means that they can be carefully graduated in difficulty and complexity as students progress through an educational program. Furthermore, by having available a library of standard, parallel simulations, it is possible for students to teach and test themselves repeatedly with interesting variations in what is essentially the same task, until performance is personally satisfying and an appropriate level of mastery can be documented. Similarly, just as a single student can be confronted over and over again with the same task, simulation enables a teacher or an examiner to standardize the task for all students and to do so without subjecting anyone to risk or inconvenience.

Thus, it is possible—in a given time period—to instruct students and to sample their performance with respect to a much broader and more representative group of situations than is feasible in a real life setting. For example, if—for

either instruction or assessment purposes—you wish to confront students with problems that evolve over many years or problems in which the full effects of intervention are long delayed, it is not necessary to wait months or years to discover the outcome of the students' actions; in carefully developed simulations a lifetime can be collapsed into a half-hour exercise. Furthermore, when the exact tasks that are to compose any learning or assessment experience are precisely defined and selected, it is also possible to develop specific, detailed criteria for judging student performance, and to train teachers and examiners in their use. Thus, a much higher level of interrater and sampling reliability can be obtained in scoring performance than can be obtained in direct observations of real life situations.

Finally, one of the most appealing advantages of simulations over reality is that, in dealing with even the most critical situations, all students can be allowed full freedom to careen down their merry way to disaster without any risk whatsoever to anyone! And at each stage of such an exercise, students can be provided with informative feedback on their decisions in a manner more instructive than life itself usually yields. The prompt, specific and unambiguous feedback characteristic of well designed simulations—even those used purely as assessment exercises—makes them a powerful tool for the enhancement of learning.

Reflections

The foregoing discussion of the advantages of simulation should not be construed as implying that I am advocating that conventional instruction and evaluation strategies should be entirely replaced by simulation technique. Clearly, there are some aspects of reality that cannot now, or ever, be economically simulated. For example, factual information is more economically conveyed and more directly measured by conventional techniques of teaching and testing. On the other end of the scale, personal and professional habits and attitudes are most firmly entrenched by repeated reinforcement, in diverse settings, over a long time span; they are most reliably assayed by careful and repeated observation under similar conditions. However, just as the advantages of simulation should not be construed as suggesting that it is a universal panacea for implementing or evaluating all components of experiential learning situations, discussion of its limitations should not be interpreted as suggesting that simulation is a pale, but adequate, substitute for appropriate real life experience, to be used only when the latter is unavailable, rather, simulation is a valuable tool in its own right and an important adjunct to other educational methods I am sure that as our skills in developing and employing this magnificent tool increase, its application will expand and it will increasingly serve to bridge the gap between the world of work and the world of study

CHAPTER 6

CHECKLISTS FOR ASSESSING EXPERIENTIAL LEARNING IN CAREER EDUCATION

What do I do now?

The materials you have read thus far in this handbook should provide you with a basic awareness of:

- The purpose and history of experiential learning
- The difference between traditional and experiential learning
- A variety of methods to assess experiential learning
- Different viewpoints about assessing experiential learning

One thought that permeates this handbook is that formal assessment of experiential learning is relatively new. A quick glance at the resources identified in Chapter 8 reveals that the preponderance of related literature was published in the seventies. In a sense, then, we are on the ground floor of this effort; and since we are at the beginning, tried and true techniques and methods for every situation do not exist. This handbook attempted to synthesize the current state of the art by providing you with some information about possible methods to use and the viewpoints of fifteen people working in this field Although the state of the art does not lend itself to a "how to" handbook, a thorough review of Chapters 2 and 4 of the handbook and the viewpoint papers does lend itself to the compilation of a series of checklists that you might find helpful as you begin to plan, implement, and evaluate your assessment activities. These checklists may serve to bridge the gap between the information in this handbook and your assessment efforts by beginning to answer the question, "What do I do now?" Each checklist raises questions for you to think about as you plan (Checklist 1), implement (Checklist 2), and review (Checklist 3) your assessment strategy

We sincerely hope that this handbook has been and will be useful to you as you develop, operate, and assess your experiential learning program. There are four other handbooks in the *Career Education Measurement Series* which may also be helpful to you and are mentioned below

Career Education Measures. A Compendium of Evaluation Instruments describes over 200 career education measurement instruments to be used for grades K-16, the

community, educators and teachers. Each abstract identifies the instrument title, author, availability, instrument description, administration requirements, validity and reliability data, and a sample item.

Using Systematic Observation Techniques in Evaluation Career Education provides a more complete discussion of the three systematic observation techniques; things to consider when using systematic observation techniques; and organizing, analyzing and justifying systematic observation data.

A Guide for Improving Locally Developed Career Education Measures discusses several issues that should be considered when creating assessment instruments (i.e., design, reliabiltiy, validity, elimination of stereotypes, formatting, and readability.)

Improving the Accountability of Career Education Programs: Evaluation Guidelines and Checklists presents the steps involved in planning an evaluation, implementing an evaluation, and using evaluation results.

Other resources that may be helpful to you are identified in Chapter 8. We encourage you to investigate these resources as you begin planning your own assessments.

CHECKLIST 1: PLANNING THE ASSESSMENT PROCESS

	Yes	No	N/A
1. Are the objectives clear to: a. you? b. employers? c. students? d. fellow assessors?			
2. Are the objectives consistent with the goals of the program?			
3. Have you established a rationale for the kind of experiential learning which will occur?			
4. Have you established a rationale for the kind of assessment planned?			
5. Have you provided sufficient staff support to monitor the assessment process?			
6. Do you have a learning agreement or contract for each student?			
7. Does your staff have adequate training in assessment techniques?			
8 Do the following people understand their roles and responsibilities in the program assessment: a. school staff? b. employers? c. students? d fellow assessors?			
9. Have you provided for assessments on a regular basis using the following techniques a. written? b. oral?			

	Yes	No	N/A
10. Are the necessary assessment resources provided for: a staff? b. materials?			
11. Have you identified the outcomes for: a. host agencies? b. students?			
12. Did you clearly define each assessment task in terms of the following educational domains: a cognitive? b affective? c. psychomotor?			
13 Do the following understand each assessment task. a. school staff? b employers? c students?			
14. Are your assessment methods (e.g., simulations, logs) matched to fit the specific learning tasks?			
15. Have you established a program philosophy regarding experiential learning?			
16 Is there staff agreement with the basic principles?			
17 Have you determined when the assessments will take place?			
18 Have you determined where the assessment will take place?			
19. Have you provided for incremental feedback during the course of the assessment activities?			

CHECKLIST 2: IMPLEMENTING THE ASSESSMENT PROCESS

	Yes	No	N/A
1. Do the assessment techniques seem to be appropriate for the learning tasks?			
2. Do the aspects you are assessing represent the more important aspects of the total program?			
3. Are your written tests relatively: a free of cultural bias? b. readable? c. understandable in their directions?			
4 Have you made sure that the assessment techniques are free from: a sexual stereotypes? b. racial stereotypes?			
5. Are your tests designed to provide a balance between obvious and obscure answers?			
6 Are you providing adequate time for student-teacher reviews of the results before entering the next phase of the program?			
7. Have you attempted to provide for validity; that is, does your instrument test what it is supposed to test?			
8. Do you have information concerning the tests' reliability; that is, are the results consistent across many implementations?			
9. Are you conducting item analyses to improve the tests?			
10 Do you collect feedback regarding the assessment on a regular basis from a. employers? b. students? c school staff?			
11. Have you developed a time schedule for the assessments?			

CHECKLIST 3: REVIEWING THE ASSESSMENT PROCESS

	Yes	No	N/A
1. Have you examined your assessment results for: a. unexpected outcomes? b. expected outcomes?			
2. Can you see agreements between assessment results and your stated objectives?			
3 Have you provided for feedback on the assessment techniques so that modification can occur by: a. school staff? b. employers? c. students?			
4 Did you review your staff and material resource inputs for clues to revision needs?			
5. Do your results indicate a need for changing your a. program philosophy? b grading or credit system? c assessment techniques?			
6. Have you noted the program impact on: a. administrators? b parents? c the business community? d. the social community?			
7 Is your assessment program attempting to strike a balance among the educational domains of: a. cognitive? b. affective? c. psychomotor?			
8 Do any of your results suggest the need for alternative. a. program settings? b facilities? c equipment? d. human resources?			
9. Have you provided for a student evaluation of the total program?			
10 Do aspects of your assessment results lend themselves to a planning? b implementation? c. reviewing modifications?			

CHAPTER 7

INDEX OF MAJOR CONCEPTS APPEARING IN THE VIEWPOINT PAPERS

Introduction

When reading the viewpoint papers in Chapters 3 and 5, we found that several writers discussed similar issues from different viewpoints. Since it is often difficult to go back and remember who said what about an issue or to find a specific point in a paper, we have developed a brief index of over thirty major concepts addressed by the writers. The index is divided into the same four sections as the papers: Perspective, Problems, Practical Suggestions, and Reflections. We hope that you will find the index to be a useful quick reference to the papers as you plan your assessment effort and review specific issues.

Index of Major Concepts Addressed by the Viewpoint Papers

CHAPTER 8

RESOURCES

A basic text in the field of assessment of experiential learning programs is *Experiential Learning* by Morris T. Keeton and Associates, published by Jossey-Bass, San Francisco, 1976. Other resources you might find helpful are listed below.

Cooperative Assessment of Experiential Learning (CAEL) Publications

Cooperative Assessment of Experiential Learning (CAEL) is a joint project of the Educational Testing Service and a group of colleges and universities. A variety of documents published by CAEL will be helpful to the local practitioner interested in experiential learning. These publications are listed below. All can be ordered from CAEL Publications, Educational Testing Service, Princeton, New Jersey 05840.

Breen, P.; Donlon, T., and Whitaker, V. *Learning and Assessing Interpersonal Competence.*

Breen, P.; Donlon, T ; and Whitaker, V. *Teaching and Assessing Interpersonal Competence.*

Calhoun, A. and others. *An Individualized Competence-Based Assessment Model.*

Daloz, L and Pitkin, C. *Standard Setting by Students and Community—How Much is Enough?*

Forrest, A *Assessing Prior Learning: Student Guide.*

Kelley, R L.; Taggart, Mac; and Spencer, R. *Analyzing Costs in the Assessment of Prior Learning.*

Knapp, J. *Assessing Prior Learning.*

Knapp, J. and Sharon, A *A Compendium of Assessment Techniques.*

Permaul, V.S , and Miko, M.B. *Documentation and Evaluation of Sponsored Experiential Learning, Institutional Report 3.*

Reilly, R. et al. *Expert Assessment of Experiential Learning.*

Tatzel, M. *Prospects and Methods for Interpersonal Studies.*

Willingham, W. et al. *The CAEL Vocational Report.*

Willingham, W. and Nesbitt, H., eds. *Implementing a Program for Assessing Experiential Learning.*

Willingham, W.; Valley, J.; and Keeton, M. *Assessing Experiential Learning.*

Books, Papers, Articles, and Reports

Coleman, Deborah, ed. *Experiential Education in the Workplace: An Annotated Bibliography.* Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University, 1979.

Crowe, Michael R., and Adams, Kay A. *The Current Status of Assessing Experiential Education Programs.* Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University, 1979.

Crowe, Michael R., and Beckman, Carol A., eds. *Perspectives on Investigating the Consequences of Experiential Education.* Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University, 1979.

Crowe, Michael R., and Walker, Jerry P. *Evaluation of the Executive High School Internships Program: Executive Summary.* Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1977.

Far West Laboratory for Educational Research and Development. *Employer-Based Career Education: Evaluation Report, FY 1973.* San Francisco, California: Far West Laboratory for Educational Research and Development, 1973

Far West Laboratory for Educational Research and Development. *Experience-Based Career Education: Final Evaluation Report, Volume II.* San Francisco, California: Far West Laboratory for Educational Research and Development, 1974

Far West Laboratory for Educational Research and Development *Experience-Based Career Education: Intern Evaluation Report, FY 1974.* San Francisco, California: Far West Laboratory for Educational Research and Development, 1974

Heerman, Barry. *Cooperative Education in Community Colleges.* San Francisco, California Jossey-Bass, 1973.

Hilderbrand, John A. et al. *Experience-Based Career Education, Appalachia Educational Laboratory. Final Evaluation Report.* Charleston, West Virginia: Appalachia Educational Laboratory, 1974.

Hood, Paul D. and Blackwell, Laird. *An Assessment System for Competence-Based Education: The Educational Development, Dissemination, and Evaluation Training Program.* San Francisco, California: Far West Laboratory for Educational Research and Development, 1975.

Hoyle, John R. *Evaluating an Alternative High School Program: A Beginning.* ERIC Clearinghouse, 1974. ED 117 816.

Jones, Joan; Watts, Rebecca; and Downing, Sybil. *Work Experience and Academic Credit: Issues and Concerns.* Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University, 1979.

McGuire, C ; Solomon, L.; and Bashook, P *Construction and Use of Written Simulations.* New York: The Psychological Corporation of Harcourt, Brace, Jovanovich, 1976.

Minneapolis Public Schools. *Work Experience Career Exploration Program (WECEP) Advisory Committee Report: Evaluation and Recommendations.* Minneapolis, Minnesota: Minneapolis Public Schools, 1972.

Miguel, Richard J., ed. *Experiential Education Policy Guidelines.* Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University, 1979.

Myer, Peter. *Awarding College Credit for Non-College Learning.* San Francisco, California: Jossey-Bass, 1975.

Owens, Thomas; Haenn, Joseph; and Fehrenbacher, Harry. *The Use of Multiple Strategies in Evaluating an Experience-Based Career Education Program.* Portland, Oregon: Northwest Regional Education Laboratory, 1975.

Owens, Tom; Haenn, Joe; and Fehrenbacher, Harry. "Evaluation of the Community Experiences for a Career Education Program " Paper presented at the American Educational Research Association Convention, 1975.

Rockart, John and Morton, Michael *Computers and the Learning Process in Higher Education.* Berkeley, California: Carnegie Foundation for the Advancement of Teaching, 1975.

Rose, Marcia et al *But For Me It Wouldn't Work Implications of the Experiential Education Guidelines.* Columbus, Ohio. The National Center for Research in Vocational Education, The Ohio State University, 1979.

Seyfarth, John T. and others. *Parents' Attitudes Toward the Program as Indicated by an Analysis of Interview Data: Employer-Based Career Education.* Technical Report No. 43. Charleston, West Virginia: Appalachia Educational Laboratory, 1972.

Seyfarth, John T. et al. *Students' Attitudes Toward the Program as Indicated by an Analysis of Interview Data: Employer-Based Career Education,* Technical Report No. 42. Charleston, West Virginia: Appalachia Educational Laboratory, 1973.

Silverman, Debra Watkins. "The Development of Techniques for Evaluating a School-Community Change Process." Paper presented at the American Educational Research Association Convention, 1975.

Virginia Polytechnic Institute and State University. *Developing and Testing Simulated Occupational Experiences for Distributive Education Students in Rural Communities, Volume I and II.* Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1976.

Wasson, Louise. *Experiential Education: A Primer on Programs.* Columbus,Ohio: The National Center for Research in Vocational Education, The Ohio State University, 1979.

Games

How to Apply for a Job. New York: Fairchild Publications, Inc.

Job Scene. Tallahassee: Florida State University, Career Education Center.

National Center for Research in Vocational Education, Career Education Measurement Series, 1979

Assessing Experiential Learning in Career Education

Career Education Measures: A Compendium of Evaluation Instruments

Improving the Accountability of Career Education. Evaluation Guidelines and Checklists

A Guide for Improving Locally Developed Career Education Measures

Using Systematic Observation Techniques in Evaluating Career Education